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What is the Agricultural Council?

UNEASINESS has been created among several sections of Australian primary industries by the setting up of an Agricultural Council, on which producers are not represented.

From all that can be learned this Agricultural Council consists of the Ministers of Agriculture from the several States and their advisers.

The dairying industry, through its central organisation, recently entered a strong protest against the activities of the Agricultural Council, on the grounds that this council came as a super body between established organisations and the Government.

Does the Federal Government look to the Agricultural Council for advice on matters of policy, or does the Government look to the established producers' organisations?

With producers' organisations State and Federal Government officers are welcomed as advisers, particularly as regards regulations. Yet, with this Agricultural Council, the producers can have no possible contact whatever.

On matters affecting the fruit industry the Agricultural Council has apparently been consulted by the Federal Government, and it must be said that fruitgrowers' organisations

in the several States do not view this activity with equanimity.

Protest from Tasmania.

The Tasmanian State Fruit Board, at its meeting in January, dealt at length with this subject, with the result that a letter has gone forward to the Prime Minister, in which the following is stated:—

"The fruitgrowing industry is greatly concerned with the report that in spite of the fact that the Minister for Commerce has repeatedly informed the Australian Apple and Pear Export Council that he looked to that body for his advice on matters concerning the fruit industry of Australia, the Government is contemplating obtaining advice from the newly-formed Agricultural Council. The Tasmanian Fruit Board strongly urges that in any of the matters upon which your Government desires advice regarding the fruit industry, it should consult the fully representative body of the industry, namely: the

Australian Apple and Pear Export Council.

"The Australian Apple and Pear Export Council came into existence in December, 1930, at the instance of the then Commonwealth Department of Markets. The council has been, and is, an active body, and has accomplished good work since its inception."

:: :: :: ::

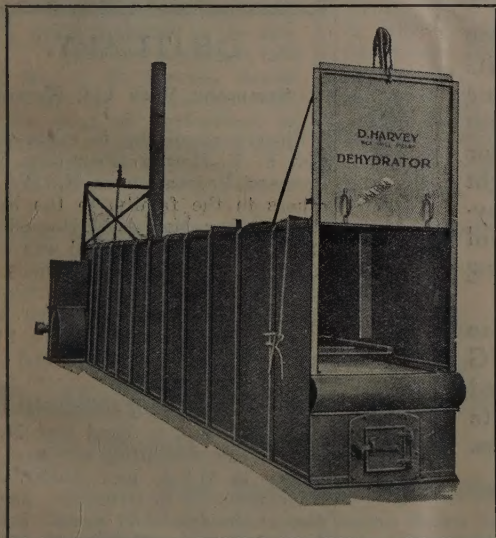
The activities of the Agricultural Council have also been the subject of adverse comment in the other Australian States.

It is generally felt that much good can be accomplished by conferences of Ministers of Agriculture in relation to uniform regulations for interstate trade co-ordination of research work in the pest and disease control, and other such matters, but matters of policy in which the producers are vitally interested must be dealt with by the producers themselves.

The position needs clarifying.

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Avoid Lightweight Sultanas through having to Pick Too Early! When you own a HARVEY DEHYDRATOR you do not have to start Picking before the full sugar content is there—you can dry in spite of the early rains which invariably set in before the drying is finished.

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PERSONAL.

Dr. Earle Page, Minister for Commerce, is leaving for London early in February to attend the World Sugar Congress. Whilst in London the Minister is to enquire into matters affecting the export of Australian fresh fruit. Mr. J. F. Murphy, Secretary to the Department of Commerce, will accompany the Minister.

Brigadier M. W. J. Bouchier, M.L.A., has been appointed Agent-General for Victoria in London to succeed Mr. R. Linton, whose term of office expires on June 30. Mr. Bouchier has been a member of Parliament representing the Goulburn Valley district for many years, he having been Deputy Premier, General Secretary and Minister of Labor. Mr. Bouchier had a distinguished war career, commanding the 14th Light Horse in the Palestine campaign. He received the Honors C.M.G., D.S.O., and V.D.

Mr. J. W. Blick, manager of the fruit section of the Producers' Distributing Society, Sydney, is leaving for London with the first shipments of Apples on February 15. During his absence the fruit section of the P.D.S. will be in charge of Mr. A. W. Blick.

Mr. C. U. B. Gurnett, general secretary for the N.S.W. Chamber of Fruit and Vegetable Industries, has resigned. Mr. Gurnett was responsible for much of the organising work in connection with the formation of the chamber. His successor is Mr. S. J. Wills, A.A.I.C.A., A.C.I.S., Eng.

Capt W. J. Wade, Australian representative for the Port of Manchester, has returned to Sydney after being in England for two and a half months. Captain Wade was impressed with the improved conditions in England, as a result of which the spending power of the people had increased considerably. This applied particularly to the North of England, where the wheels of industry were revolving with more consistency than previously. Manchester, he said, was in a very prosperous condition, and would be found an excellent market for Australian fruit this year. The market for Australian and New Zealand dairy produce was increasing in Manchester, and much of Captain Wade's time in England was devoted to this aspect of trade. Captain Wade looked well on his return, and the trip had improved his health considerably.

CODLIN MOTH IN PEARS.

Scientific Investigation Needed.

THE GROWING OF PEARS for canning, local marketing and export is now an important industry in the Goulburn Valley, Victoria.

But the codlin moth is a problem.

In some years the loss is up to 20 per cent. through the codlin moth.

Whereas there has been considerable research work into the problem of codlin moth control with Apples, there does not appear to have been specific research work as regards Pears. All the spray schedules so far issued refer to Apples; none are available for Pears.

The Northern Victoria Fruit-growers' Association has now taken up this matter with vigor and the State Government has been approached to have an officer set apart for this important work.

There are definite lines of enquiry awaiting attention as regards the codlin moth in Pears, and a thorough investigation into the problem would be welcomed by the growers; this would be of economic value to the community at large.

OBITUARY.

Sympathy With Col. Herrod.

Sincere sympathy is expressed to Col. E. E. Herrod (Secretary Fruit-growers' Federation of N.S.W.), and others in the family, in the loss of their mother, Mrs. A. M. Herrod, aged 72. The late Mrs. Herrod was widely esteemed for her many kindly services performed during an active life. During the war she was an active worker for the Red Cross. She is survived by her husband and four sons.

Dr. Elwood Mead Passes.

News is just to hand that Dr. Elwood Mead, consulting engineer, well known in U.S.A. and Australia for his experience in irrigation, has just died at the age of 77 years. Brought from U.S.A. to Victoria in 1907 by the Bent Ministry, Dr. Mead was Chairman of the State Irrigation Commission till 1915, and it was under his active supervision that much of the irrigation work in the Goulburn Valley was laid out. In 1924 Dr. Mead was appointed Commissioner of Reclamation in U.S.A. by the Coolidge administration.



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NEPTUNE WHITE SPRAYING OIL

NEWS IN BRIEF

Now is the time for sowing cover crops for ploughing in at end of winter or early spring.

:: :: :: ::

Why are there three names in Australia for one variety of Pear—"Bartlett" in W.A., "Duchess" in South Australia, and Williams or Williams Bon Chretien in Victoria?

Uniform nomenclature is long overdue!

:: :: :: ::

Apple plantings in South Africa have increased by 90 per cent. during the past 20 years. Citrus plantings have increased from 1,562,646 trees in 1911 to 4,352,500 trees in 1930. Mr. W. J. Spafford, Deputy Director of Agriculture for South Australia, who recently returned from a visit to Sth. Africa, states there will be a big increase of production in the near future.

:: :: :: ::

The Tasmanian State Fruit Board has written to the Prime Minister requesting that on matters of policy the Australian Apple and Pear Export Council, on which growers are fully represented, be consulted, not the Agricultural Council, which does not represent the growers in any way.

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Our London correspondent says that an effort is being made to have pure fruit juices sold at milk bars. An annual demand for 1,000,000 gallons of fruit juices is hoped for.

:: :: :: ::

In a recent broadcast talk, Mr. Frank M. Read, M.Agr.Sc., Chief Inspector of Horticulture, Victoria, urges the necessity for observing correct picking and storage dates to ensure full flavor in Apples.

:: :: :: ::

All orchards and nurseries in New South Wales must be registered before February 28 to avoid penalty.

SHOWS TO COME.

Diamond Creek—March 14.

Somerville—March 25.

Red Hill—April 8.

APPRECIATION FROM
NEW ZEALAND.

The Editor, Sir,

I have been a reader of the "Fruit World" for over 25 years, and I would not be without it on any account, as the information supplied therein is most useful and instructive.

With best wishes for the future of the "Fruit World,"

(Signed) "H.I." Henderson, N.Z.

BROADCASTING.

"GREEN MANURING OF GORCHARDS" is the subject of a broadcast talk by Mr. E. E. Pescott, Senior Horticultural Instructor, Victorian Dept. of Agriculture, on February 28 over Station 3AR, commencing at 6.48 p.m.

Canned Fruit Prices Announced

Slight Increase on Some Lines.

As we go to press, finality has been reached upon prices to open up the export season. For London sales, Apricots, Pears and most Peach lines remain at last year's prices, with a slight reduction on 30-oz. Peaches as compared with 1935, owing to more intense competition from U.S.A. packers, a heavy crop and the depreciation of the dollar. Canadian prices have been generally maintained, with a slight increase on some lines. New Zealand prices have slightly decreased all round, owing to more severe competition from California that marked last year's trading.

A GREAT KING PASSES

The Editor and staff of the "Fruit World and Market Grower" join with their readers throughout the Empire in expressing deep sympathy with Queen Mary and all members of the Royal family in the passing of our beloved Sovereign, King George V. Our late King endeared himself to all his subjects. He was an able leader of his people, and was, in addition, a loving husband and father.

From the greatest to the humblest member of the British Empire, King George was trusted and loved as a friend. In the wider sphere of nations and world affairs no one could have been more universally respected than our departed Sovereign. He has left behind a record of noble and unselfish service, and he has earned the reward, "Well done, thou good and faithful servant."

:: :: :: ::

In the midst of our profound sorrow at the closing of this great career we greet our new King, Edward VIII., with that full confidence that he will worthily fulfil the noblest traditions of the British race.

Citrus Research

A meeting of the Commonwealth Citrus Technical Research Committee was held at the rooms of the Council for Scientific and Industrial Research, Melbourne, on January 29, 30 and 31, Dr. R. T. Vickery presiding. There were also present (for Victoria) Messrs. F. M. Read and G. B. Tindale; (from N.S.W.), Messrs. C. G. Savage, R. J. Benton, McCleary, E. G. Hill; (from C.S.I.R.), Dr. Trout, Dr. Huelin, Dr. W. J. Young, Messrs. Lynch and E. West; (from S. Aust.), Mr. A. G. Strickland.

The committee is investigating storage problems associated with citrus fruits, about which much valuable information has been collated.

PARASITES FOR FRUIT PESTS

RETURN OF MR. W. B. GURNEY.

Biological Control Sought for Fruit Fly and White Wax Scale.

THE entomologist of the N.S.W. Department of Agriculture, Mr. W. B. Gurney, returned to Sydney early in January, after an extended visit abroad in search of parasites for fighting the white wax scale and the fruit fly.

Mr. Gurney secured specimens of parasites of the fruit fly in India, and four varieties of the parasite on the wax scale in Kenya and Uganda. All of the parasites are very minute, and all varieties were fed during their journeys in glass tubes on specks of honey. Some of them were procured in the jungles, and others in cultivated territories during a tour by Mr. Gurney lasting more than eight months.

Although hopeful as to the success of his efforts, Mr. Gurney said it remained to be seen whether the specimens he had obtained would adapt themselves to Australian conditions and exercise appreciable control of the pests. If they did so great benefit to the fruit industry would ensue.

Parasites of Citrus Pests.

It will be remembered that when the cottony cushion scale became established in California, and caused great losses, an entomologist came from U.S.A., and found a small ladybird, known as *Vedalia cardinalis*. This, it was found, controlled cottony cushion scale to such an extent in Australia that the pest was finally vanquished in California.

Black scale also caused much trouble to citrus growers and nurserymen who specialised in ornamental shrubs, and another Australian ladybird, *Rhizobius ventralis*, was introduced. This took hold of its work with a vigor that soon exterminated another of California's worst scale pests.

Ladybirds Attack Pests.

Yet another ladybird, *Orcus calybeus*, was introduced from Australia, and was found to control yellow scale

and red scale, and another little beetle, known as *Rhizobius lopantha*, was found to be a voracious consumer of purple scale, and five other serious fruit pests in California.

Scymnus vagans, a ladybird, found in Australia by a Californian entomologist, was also introduced into California, and was found a most valuable parasite of red spider, which, in dry years, attacks a wide range of host plants, and reduces the crops of Almonds, Prunes and citrus trees.

The most notable introduction from Australia, however, was the ladybird known as *Cryptolaemus montrouzieri*, which is the natural enemy of the mealy bug.

This was not only taken to California, where it practically wiped out the pest in vineyards, but was sent to Hawaii, where mealy bugs threatened to destroy the coffee plantations.

Quite recently supplies of *Encarsia*, the parasite of the white fly, a pest of Tomatoes grown under glass, have been introduced into N.S.W., and this troublesome insect should very soon be wiped out, if the experience of English glasshouse growers is repeated here.

The tachnid fly, *Masicera pachytyli*, which lays its eggs in the bodies of caterpillars of various kinds, as well as being a most useful parasite of the locust (grasshopper) was also introduced from Australia into California.

Success in Australia.

Among the parasites that Australia has obtained from overseas the two best known are the Prickly Pear destroyer, *Cactoblastis cactorum*, and the woolly aphid parasite, *Aphelinus mali*, both of which have done yeoman service on behalf of the primary producer throughout the Commonwealth.

Both the Department of Agriculture and the C.S. and I.R. are encouraging the introduction of insects to control pests.

FRUIT FLY CONTROL

Lures and Spraying.

FROM NOW ONWARDS fruit fly attack in summer fruits may be expected to become increasingly severe. Every effort should be made by growers to carry out rigorously the control measures recommended for this pest. A reduction now in the fruit fly population is of the utmost importance, as it is more effective to attack the pest when it is numerically weak than when it is present in large numbers later in the season.

All waste and infested fruit should be carefully destroyed by burning, boiling or placing in an insect-proof pit. The last method is strongly recommended, both for its effectiveness and convenience.

In addition, trapping or spraying should be systematically carried out,

beginning with the earliest varieties and continuing the treatment in accordance with the sequence in which they ripen.

The Lure. — The formula for the lure to be placed in the trap is:—

½ fluid oz. essence of vanilla.

½ fluid oz. ammonia.

26 fluid oz. water.

The Spray.—The spray is made up of—

4 ozs. lead arsenate powder.

4 lb. molasses or treacle.

1 gallon fruit syrup (made by boiling 5 lb. inferior fruit in 1 gallon water until pulpy).

3 gallons water.

Fruitgrowers in N.S.W. (on however small a scale) may be reminded that measures for the control of fruit fly are compulsory under the Plant Diseases Act, and that neglect to apply them may involve a penalty of up to £50.

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Success in New Zealand and Canada.

Tests are Being Made in N.S.W. and Tasmania :: Corky Pit is Not the Trouble Generally Known in Australia as Bitter Pit.

SOME INTERESTING RESULTS were obtained in N.Z. following the injection of trees with boric acid. Details are given by Mr. J. D. Atkinson, in the March issue of the "N.Z. Journal of Science and Technology" as follow:—

Since 1912 a disease of unknown origin has been present in the Nelson district. The condition is characterised by the presence of numerous brown, corky areas in the flesh of the fruit, especially in the region of the core. To this disease has been applied provisionally the name of corky-pit, as it most aptly describes the symptoms. It is also known locally as poverty-pit, cork, corky-core, brown-heart, crinkle, drought-spot, or

bitter-pit. Reports of investigators in America and Australia indicate that there are similar diseases in those countries, but, with our present knowledge, it is not yet possible to associate these with the New Zealand condition.

Although corky-pit has been known in the Nelson district for twenty-three years, it assumed economic importance only in certain seasons, notably those of 1923-24, 1925-26, and again during the past four years.

During the winter of 1933 a preliminary field survey of the corky-pit position was made through the Nelson district. From information thus secured it appeared possible that the disease may be due to mineral defi-

ciency. In the spring of 1934 were commenced numerous field investigations, which included a series of injection experiments, the purpose of which was to determine whether the disease was influenced by supplying the tree with small amounts of various mineral salts. The salts of the following were tested:—Aluminium, barium, boron, calcium, copper, iodine, iron, magnesium, manganese, molybdenum, nitrogen, sodium, titanium, uranium, vanadium and zinc.

The method adopted

was a modification of that used at East Malling by Roach (1934). A 3/4-inch hole was bored horizontally into the trunk below the fork, and so placed as to give maximum depth without breaking through the opposite side. The aperture was stopped with a rubber cork through which was inserted a glass tube. The substance to be injected was prepared as a weak solution in water and placed in a large bottle (containing approximately 2 litres) hung from the fork of the tree. From this reservoir the solution passed through rubber tubing to the cavity. During November, 2,000 c.c. of solution could be applied to a moderately large Apple tree within two

hours, the rate of intake varying directly with the size of the tree.

Experimental trees were selected for corky-pit susceptibility the previous autumn, and in that season each tree showed some degree of pitting in every Apple. Three varieties, Sturmer, Jonathan and Granny Smith, were used for the series. All injections were conducted during the second and third weeks of November, at which time fruits ranged from half inch to three-quarter inch diameter, and without trace of disease. Fruits were picked between February 26 and March 1, and all Apples were cut to determine whether or not disease was present in flesh or core. No attempt was made to separate differing degrees of infection of Apples with but one lesion being grouped with those severely pitted.

From these tables of results it is to be seen that fruits from three trees treated with boracic acid remained free or showed but a low percentage (3 per cent.) of corky-pit, whereas those from other treatments were severely affected (36 to 100 per cent.). Untreated contiguous trees, used as checks, showed some degree of pitting, the percentage ranging from 36 per cent. to 100 per cent. This series of experiments suggests, therefore, that corky-pit is materially influenced by the addition of boron.

:: :: :: ::

Commenting on the foregoing, Mr. Frank M. Read, M.Ag.Sc., Chief Inspector of Horticulture, Victoria, writes as follows on January 16, 1936:—

The corky-pit to which reference is made does not substantially conform to the bitter-pit sometimes seen in Victorian Apples, and at present it does not appear that the disorder which appears in this State can be corrected by injection as described in the paper by J. D. Atkinson.

In Victoria we are using a similar injection method for the study of nutritional disorders, but no evidence is yet available on the effect of boron.

A similar trouble to the New Zealand corky-pit is, I understand, quite important in parts of Tasmania, and in certain districts in N.S.W., notably Kentucky. I am further led to believe that trials of boron injection have been made with some success in Tasmania.

I understand that in Canada a disease similar to the New Zealand corky-pit is responding to the treatment with boron as outlined in Atkinson's paper.

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A Dependable Spray for Fungus Diseases and Pest Control.

NOTE.—It has been proved that the Polysulphides alone possess fungicidal and insecticidal properties. This Concentrated Liquid Lime Sulphur is manufactured under conditions that produce a maximum of Polysulphides and a minimum of other constituents.

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Codlin Moth Tree Bands

Certain Death to all Grubs that attack Fruit Trees.

It is estimated that of all Codlin Moths more than 60% are females and that a female moth lays as many as 50 eggs. On the assumption that only 50% of the eggs are fertile, a kill of 100 grubs in a tree band is definitely responsible for the prevention of 2,000 moths in the first year.

The Band is actually a double trap, as it not only traps the grubs in the corrugations lying immediately next to the trunk of the tree, but a similar number are trapped and killed in the second series of small passages which are formed by the smooth outside section of the Band against the corrugated section.

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Marketing Apples and Pears in Australia

EXPORT STANDARDS FOR EXTRA FANCY AND FANCY APPLES ADOPTED FOR LOCAL AND INTERSTATE MARKETING :: GRADES INCLUDE LARGE APPLES AND VARIETIES DEBARRED FROM EXPORT :: "GOOD" AND "DOMESTIC" STANDARDS DECIDED.

Pear Marketing Standards Agreed to.

Important Interstate Conference at Melbourne.

AN INTERSTATE CONFERENCE of fruitgrowers and Departmental Officers to revise local fruit grading regulations was held at the rooms of the Commercial Travelers' Association, Melbourne, on January 29 and 30. The conference was convened by the Victorian Fruit Marketing Association. Mr. G. W. Brown presided.

There were also present: Messrs. C. O. Smith, R. Thompson, P. H. Thomas and A. J. Honey (Tasmania); C. G. Savage (N.S.W.); A. G. Strickland (S. Aust.); J. J. Tully, F. Moore, J. M. Ward, W. A. Thiele, W. H. Carne, H. M. McLean, G. Douglas, W. P. Mair, G. H. Anderson, E. W. Thompson (Retailers' Association) (Victoria), and R. E. Boardman, Secretary. An apology was received from Mr. J. W. Bailey, absent through illness.

The principal discussion ranged around the definition of "Fancy" grade for Apples.

Victoria desired the grade to be permitted to include Apples having slight blemish (not the 10 per cent. maximum as in the export standard), and full color requirements, believing that this pack would be superior to one containing fruit with no blemish but lacking color.

Tasmania took the stand that the inclusion of Apples with the possibility of $\frac{1}{4}$ in. blemish on each specimen would lower the grade: but they did not desire color grading.

Mr. Savage said N.S.W. desired the extra fancy and fancy grades as set out in the present regulations, with the inclusion of a "hail" grade between "Fancy" and "Good."

Victoria suggested as a compromise the inclusion of 10 per cent. blemish (as in export grade) and the balance of the fruit to be permitted to have slight blemishes ($\frac{1}{4}$ ") due to limb rub or hail; color requirements to be fulfilled.

Tasmania stood firm as to the non-inclusion of more than 10 per cent. of blemished fruit.

Conference sat for two sessions without reaching an agreement.

On resuming on Thursday, January 30, Tasmanian delegates reaffirmed their opposition to allowing the possibility of 100 per cent. of slightly blemished Apples in "Fancy"

grade, stating their conviction that neither the State Fruit Board nor the growers generally would agree to what was considered a lowering of the standard. "Fancy" was the big pack and the permission to include even the slight blemishes as desired by Victoria would mean heavier shipments than the markets could absorb. Further, much forward buying had been arranged on present standards.

The chairman said much good would result from the present Conference even if agreement could not be reached at this stage.

Mr. Ward suggested that the Interstate Conference re-assemble at Sydney in June or July, and for the fruit from the several States on the Sydney market to be then inspected.

Mr. Thiele then moved:—

"That the export standards for 'Extra Fancy' and 'Fancy' Apples be adopted for local and interstate markets, with no size limit as to large-sized Apples and adding varieties not now permitted to be exported."

Mr. R. Thompson (Tas.) seconded. The Chairman said three votes would be allowed for each State, and he nominated Messrs. Moore, Carne and Douglas to vote for Victoria.

Mr. Moore said he would agree to the motion on the understanding that Departmental Officers administered the regulations with discretion.

The motion was carried. It was decided to ask each State to draw up a list of varieties to be sent interstate with minimum color requirements.

Tasmanian delegates notified that their State would send only "Extra Fancy" and "Fancy" grades to mainland markets unless marketing conditions warranted the sending of a third grade.

The third grade of Apple which is to be known as "good," was defined as follows:—Apples described as good shall consist of Apples of one size and one variety, free from broken skins and not seriously blemished or injured by any disease; but fruit slightly blemished by black-spot fungus, caterpillars, hail-marks or limb-rub may be sold, provided that the total area covered by such blemishes on any Apple does not exceed the area contained in a circle having a dia-

meter of half an inch. Russetting of the surface shall not be deemed to be a blemish if the skin is unbroken. The diameter of Apples shall not in any case be less than 2 inches. Apples of the minimum diameter of two inches bearing any signs of black-spot fungus shall not be sold.

Domestic Grade.

Mr. Moore moved the resolution introduced by Mr. Tully the previous evening:—

"That a Domestic Grade be included allowing for 25 per cent. of the Apples of $2\frac{1}{2}$ in. and over to contain a blemish of $\frac{1}{4}$ in. diameter."

He pointed out that this was for marketing in Victoria only (not for shipping interstate) and would be the lowest grade which would be permitted to be sold in the State. To provide an outlet for this perfectly sound fruit he would prefer that the regulation should provide for all the Apples in the case to be permitted to have this skin blemish.

Samples of Apples were submitted which would go into the Domestic Grade.

Mr. Douglas said it would be better to provide that all the Apples in the case in Domestic Grade could have the $\frac{1}{4}$ in. blemish if fruit over $2\frac{1}{2}$ in. diameter.

Mr. Moore said he would, with the permission of his seconder, alter his motion to include that all the Apples in the case in the Domestic grade could carry the blemish.

Mr. Thiele spoke in opposition, stating this would lower the grades, while the objective should be to lift them. He would agree to the $\frac{1}{4}$ in. blemish as a hail mark on all Apples but not black spot.

After further discussion and in an endeavor to arrive at a unanimous vote, Mr. Moore agreed to move the resolution as originally drafted, and in this form it was carried unanimously.

Pear Grading Standards.

Four grades of Pears were decided upon: "Extra Fancy," "Fancy," "Good" and "Domestic." The grades adopted were those submitted by the Victorian Fruit Marketing Association (see report elsewhere in this

\$100,000 GRANT.

For Apple and Pear Growers.

The Federal Cabinet has decided to make available £100,000 for the assistance of Apple and Pear growers.

The money will be allocated as follows:—

£10,000 for conversion of orchards, to enable saleable varieties of fruit to be grown.

£10,000 for research and investigation of Apple and Pear problems, to be used either directly through the State Departments of Agriculture, or in conjunction with work being done by the Council for Scientific and Industrial Research.

£80,000 to be distributed among the States in proportion to their respective shares in the Apple and Pear exports during 1934-35, for payments to growers.

issue), with the exception that at the wish of N.S.W. the minimum size in "Good" grade should be $1\frac{1}{2}$ in. (not 2 in. as recommended by Victoria).

N.S.W. also desired a minimum of 2 in. in "Extra Fancy" (in lieu of $2\frac{1}{2}$ in. as proposed), but after discussion and examining specimens, the 2 in. proposal was not accepted.

Victorian delegates, however, asked N.S.W. to reconsider the minimum of $1\frac{1}{2}$ in. (as decided upon in "Good" grade), with the request that the size be lifted to 2 in., believing that this would be in the best interests of growers in all the States.

Cordial references were made to the tact displayed by the chairman, and a hearty vote of thanks was conveyed to Mr. Brown.

PEACH "DEFUZZING" MACHINE.

Said to be Effective.

Reports of development of a fuzzless Peach in Virginia (U.S.A.) left North Carolina growers unperturbed.

Even when they learned the new fruit resembles the famous Georgia Belle, a white freestone, the Peach men refused to get excited.

When buyers demanded a fuzzless Peach, science came to the aid of growers of this State. It produced a "de-fuzzing" machine.

This machine is about six feet long, four feet high and four feet wide. Peaches rolling in at one end are fed through revolving brushes and over a fan that blows out the fuzz.

The brushes are so delicate and the work so carefully done that growers say the tender fruit is not damaged or bruised in the least.

FIVE MILLION WALNUT TREES.

Indiana Extending Acreage.

With two objects in view, the supply of a greater proportion of the American market for Walnuts and providing sustenance work for unemployed men, the Forestry Department in Indiana is planning the planting of 5,000,000 Black Walnut trees on unused land in the southern portion of the State.

Not only will this provide a reasonable return to the State when the trees begin to bear fruit, but it will fill up a fair area of forest lands that have become denuded in recent years, and provide employment for numbers of men for several months during next spring.

The Famous BAY VIEW FRUIT PICKING BAG

REDUCES YOUR PICKING AND PACKING COSTS

Note These Points About This Excellent Labor Saving Device.

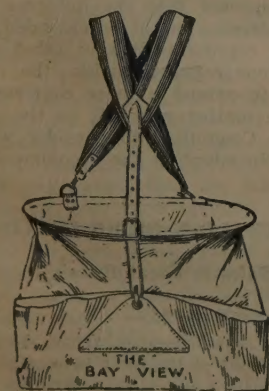
- 1—Can be used for any class of fruit.
- 2—Allows the use of both hands in picking.
- 3—No bruising of fruit. Weight carried on shoulders instead of back of neck.
- 4—Full way opening for discharge.
- 5—No hooks to injure trees.
- 6—No complicated fixings to get out of order.
- 7—Packs into small compass when not in use.

The Cost is More Than Recouped in One Season.

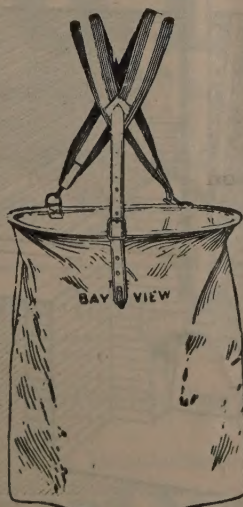
Mr. Val Kerr, one of Victoria's leading orchardists, writes:—

"I have been using Bay View Bags for eight years, and find that they expedite considerably the work of picking. They are comfortable to wear, and the fruit is handled with a minimum of bruising."

SOLE MANUFACTURERS:



Bag Closed Ready for Picking.



Bag Unhooked Ready for Discharge.

FOTHERINGHAM'S PTY. LTD. - 118 Charles Street, LAUNCESTON

VICTORIAN AGENTS:— F. R. MELLOR, 440 ELIZABETH ST., MELBOURNE.

Dried Fruits Department

Annual Interstate Dried Fruits Conference.

RESTRICTION OF PLANTING URGED.

THE ANNUAL Interstate Conference of the Dried Fruits Control Boards was held in Melbourne on January 29 and 30, when representatives of all dried fruits producing States were present under the chairmanship of Mr. J. M. Balfour, Chairman of the Victorian Dried Fruits Board.

The following official delegates reported:—

Western Australia: J. N. Cox and E. H. Rosman.

South Australia: G. A. W. Pope, H. J. Crawford, J. B. Murdock, C. E. Russell and W. N. Twiss.

New South Wales: Hon. T. Steele, M.L.C., L. B. O'Donnell, G. A. Try, and G. J. Evatt.

Victoria: J. M. Balfour, H. V. Davey and W. Cremor.

Amongst others present were Messrs. E. J. Hogan, Minister for Agriculture, Victoria; H. A. Mullett, Director of Agriculture, Victoria; J. J. F. Scouler, London representative of the Board; Hon. Frank Old, Minister for Water Supply; E. J. Mulvaney, Export Control Board; H. Thomson and Ross Grant, Commonwealth Department of Commerce; W. C. F. Thomas, Chairman Commonwealth Dried Fruits Export Control Board; Senator Brennan, Assistant Minister for Commerce; E. J. Hudson and H. D. Howie; Mr. W. N. Twiss (S.A.) was Secretary of the Conference.

Minister's Remarks.

In opening the conference, Mr. Hogan, Minister for Agriculture for Victoria, said that in 1924 the world's production of dried vine fruits considerably exceeded the demand, and, in order to stabilise the Australian Dried Fruits Industry, Federal control legislation was enacted in 1924, and State control legislation was introduced into Victoria and S. Aus. in 1924, W.A. in 1926, and N.S.W. in 1927.

In the first year of legislative control—1925—the production of dried vine fruits in Australia was 37,786 tons, of which 24,375 tons were produced in Victoria. In 1933, the Australian production had increased to

78,023 tons, and the Victorian production had risen to 49,929 tons. In 1925 the exportable surplus of Australian dried vine fruits was 24,528 tons, which increased to 65,727 tons in 1933, whilst during the same period, our exports to Canada increased from 776 tons to 14,528 tons, and to New Zealand from 1,487 tons to 3,367 tons.

The United Kingdom was the principal market for Australian dried vine fruits. The total consumption of the United Kingdom in 1933 was 127,000 tons, of which Australia provided 54,700 tons, or 43.07 per cent. of total imports. Owing to seasonal disabilities, production in 1935 season was below normal, Australia producing 64,700 tons, of which Victoria produced 38,000 tons. Of the Australian pack of 64,700 tons, 49,700 tons, or 76.8 per cent. of the pack, were sold in overseas markets, as follow:—U.K., 30,450 tons; Canada, 14,650 tons; N.Z., 3,700 tons; other destinations, 900 tons; making a total of 49,700 tons. The quantity of unsold fruit in the U.K. at present was 1,977 tons, and should be disposed of before the arrival of 1936 new season's fruit.

Overseas Markets.

Owing to the operation of trade treaties, continued the Minister, Australia enjoyed preferences as follow:—In Great Britain, Australian Sultanas and Lexias are admitted free, whilst a duty of £10/10/- per ton is levied upon produce of foreign countries. Currants are similarly admitted free as against a duty of £2 per ton against foreign countries. In Canada, Australian Currants and Raisins enjoyed a preferential duty of £18/13/4 per ton, whilst in N.Z., Australian Raisins are admitted at 1d. per lb. less duty than foreign Raisins.

Section 92, Commonwealth Constitution.

An appeal was being made to the Privy Council against the decision of the High Court which had upheld the validity of the Commonwealth Legislation under which interstate trade in dried fruits and dairy pro-

ducts was regulated. An adverse decision by the Privy Council would seriously hamper dairy products and dried fruits, and would also prevent similar schemes of orderly marketing being carried out in respect of other products.

The value of the Dried Fruits Industry to Australia was seen when we remembered that total production was valued at £3,250,000 and that export trade approximated £2,500,000. Contributing to this turnover was the following registered growers in the four producing States: Victoria 2,376, S.A. 2,200, N.S.W. 550, and W.A. 400, or a total investment in the industry by 5,526 growers.

Mr. Thomas' Warning.

"A few malcontents in the industry," said Mr. Thomas, Chairman of the Commonwealth Dried Fruits Export Control Board, attempted to upset all the legislation drafted to benefit the industry. They are in the minority, yet they try to stifle the efforts of the majority of growers. Of 80,000 tons that should be produced this year, 67,000 tons will have to be exported, and he is doubtful if the present available markets can absorb that quantity.

"What steps can the Boards take to prevent increased planting? Any power that the Boards have should be exerted to prevent any extra planting at the present time as a protection to present growers. The Victorian Department of Agriculture will assist in any way it can to limit an extension of acreage.

"It is unfortunate that growers in Victoria will this year suffer a loss of approximately 50 per cent. of their crops because of weather conditions and floods. We sympathise with them as a lessened production will not mean an increased price for their smaller production, as Greece can supply any shortage of shipments from Australia. In studying the London market we find that early sales bring the most satisfactory prices."

In conclusion, Mr. Thomas submitted that all fruit for export should be pooled so that all growers, early and late, should be enabled to receive uniform returns. In his opinion this was a fair and practical scheme. He was glad to announce that satisfactory arrangements have been made by which both Canadian and

New Zealand shipments would be continued this coming season.

Section 92.

Senator Brennan explained at length Section 92 of the Commonwealth Constitution and its application to the Dried Fruits industry.

Business.

The delegates then went into conference, the press not being invited to remain, and after the closing session the Secretary briefly outlined the main matters that could be released for publication.

Freights: Following negotiations with the shipping companies it is expected that improved freight conditions will be granted this year.

Prunes: The difficulty at present experienced in marketing low-grade Prunes was discussed and it was resolved to recommend to State Boards that steps be taken with a view to prohibiting the marketing of Prunes of counts of 120 or over to the pound, also to explore all possible means for discovering by-products from low-grade Prunes.

Restriction: After a survey of the position of the plantings of dried vine fruits in each producing State had been made, it was agreed that, in view of the world position, the Governments of all producing States should be asked to restrict further plantings.

1935 Production: Statistics giving the position for 1935, showed that the following quantities of dried fruits were produced in the Commonwealth for 1935:—Currants, 21,148 tons; Sultanas, 40,587 tons; Lexias, 5,699 tons; Prunes, 2,562 tons; Peaches, 638 tons; Apricots, 1,484 tons; Nectarines, 52 tons; Pears, 153 tons.

Quotas for 1936.

The opening quotas for 1936 were considered, and it was agreed that in view of the present uncertain climatic conditions, and the severe damage caused to the Currant crop by the recent abnormal rains throughout the Murray valley in Victoria and South Australia, it was desirable to recommend tentative quotas only. The Conference desired to make it abundantly clear that any statement regarding crop prospects at present would be premature. The quotas, therefore, which the Conference would recommend the Boards to accept would be subject to review as the season advanced. It was agreed to make the following recommendation for Commonwealth quotas:—Currants, 20 per cent.; Sultanas, 10 per cent.; Lexias, 30 per cent.; Prunes, Peaches, Apricots and Nectarines, each 40 per cent.; Pears, 30 per cent.

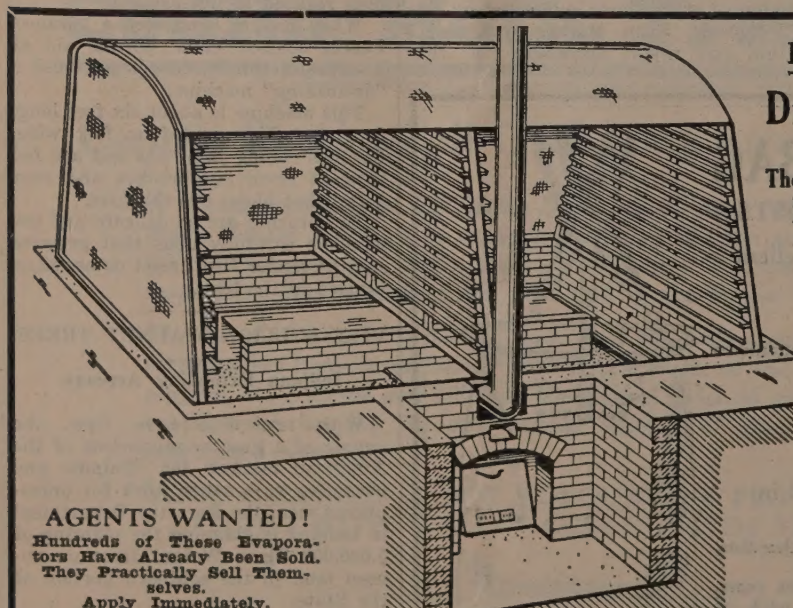
Before the Conference concluded it was suggested that the influence of the Conference might be extended by inviting representatives of other organisations connected with the industry to attend a later conference and the matter was left to the Interstate Committee to consider with a view to adopting the recommendation.

AUSTRALIAN DRIED FRUITS.

Sales in Great Britain.

Melbourne, 25/1/36.—

The Commonwealth Dried Fruits Export Control Board is in receipt of advice from London that 230 tons of Australian dried fruits were sold in Great Britain during the past week. The principal business was represented by 214 tons of Currants, which averaged £30/1/9 per ton. Normal trading conditions are not expected for the next week.



Remarkable Invention

Dries Fruit in 2-3 Days!

Rain or Shine.

The ALL-WEATHER Patent EVAPORATOR

By this process fruit can be dried in 2-3 days with absolute certainty of satisfactory results. The product is remarkably even in color, and comes out with unimpaired bloom, carrying a really appetising appeal to the buyer.

Compare this with the costly and tedious rack-drying process—and, remember, drying can start with picking. Weather cannot affect the efficiency of the evaporator. Rain or shine.

New trays are not required. Simple, economical, efficient, reliable. Requires no attention except for occasional firing.

Saves Time — Saves Fruit — Saves Racks — Saves Worry. Write for Full Particulars.

AGENTS WANTED!

Hundreds of These Evaporators Have Already Been Sold. They Practically Sell Themselves. Apply Immediately.

SOLE MANUFACTURERS AND DISTRIBUTORS FOR AUSTRALASIA.

Horwood Bagshaw Ltd.

Offices & Works: MILE END, S.A. BOX 381D, G.P.O., ADELAIDE, S.A. Showrooms: 78 CURRIE ST

N.S.W. Dried Fruits Board

MANY TOPICS DISCUSSED AT ANNUAL MEETING :: EXPORT AND LOCAL SALES :: CANNED AND DRIED PRUNES.

At the annual meeting of the New South Wales Dried Fruits Board, held in Sydney recently, there was a full attendance of members, namely, Mr. G. J. Evatt (chairman and Government nominee), Mr. E. J. Hudson (of Yenda), representing dried vine fruit growers on the Murrumbidgee Irrigation Areas), Mr. L. B. O'Donnell (of Curlwaa, representing dried vine fruit growers in the State of N.S.W. other than those resident on the Murrumbidgee Irrigation Areas), Mr. Thomas Steel, M.L.C. (of Young and Sydney, representing dried tree fruit growers in the Young and Koorawatha districts), and Mr. P. Cox (representing dried tree fruit growers other than those resident in the Young and Koorawatha districts).

A lengthy agenda included matters of a domestic nature to the board or of a personal nature to individuals. A large number of applications was received for:— (a) Renewal of registration under the State Act of dried fruit packing houses for the year 1936; (b) owners' and carriers' licences, under the Commonwealth Act, to transfer dried fruits interstate during 1936.

These were dealt with, together with many formal matters such as receipts and expenditure by the board, adjustments by certain packers in connection with the quota provisions of the Act, export credit, registration of dealers, inspections in connection with illegal traffic in dried fruits, contribution to the Dried Fruits Joint Publicity of Australia, and dried fruits growers in isolated districts.

With regard to the contribution by growers towards the cost of defraying the expenditure involved in the administration of the Act, and of carrying out the duties and functions of the board thereunder, it was decided that the present rate of one-thirty-second penny per lb. should stand for the year 1936. It was also decided to collect this contribution on behalf of the growers from the person who is the owner of the packing house to which the dried fruits are delivered.

It was decided that dried fruits diverted from the ordinary channels of disposal to manufacturing purposes in Australia, such as that used for the manufacture of confectionery, should be purchased from "home consumption" fruit.

The chairman was asked to suggest, at the interstate conference of Dried Fruits Boards, that the accepted annual Commonwealth consumption of the various varieties of dried fruits be revised on the basis of Commonwealth sales made during the year 1935.

It was resolved to also recommend at this conference that the State and Commonwealth Governments be approached to pass legislation to provide that dried

Prunes canned in syrup be regarded as dried Prunes for the purposes of the State and Commonwealth Dried Fruits Act.

In connection with Prunes in syrup, it was agreed that the dried Prunes do not lose their identity until they are actually canned in syrup. That is, they are dried Prunes within the meaning of the Act until the process of canning them in syrup actually takes place. The producers thereof have a right to vote at an election of members of the board, and have to pay to the board the contribution imposed on growers of dried fruits.

As dried Prunes it is necessary for them to be passed through a registered packing house, and if they are not canned in syrup at such registered packing house, it is necessary for them to be properly released by

an inspector from the packing house to the manufacturer, i.e., the person who cans them in syrup.

A further matter to be placed before the interstate conference of Dried Fruits Boards is the question of elimination from the regulations of the grade of Prunes known as "small." This, if adopted, will have the effect of counts of Prunes over 120 being eliminated from the pack. The regulations at present allow any Prunes, no matter how small, to be packed and disposed of on the market, provided they are thoroughly cured and free from disease, damage, fermentation, mould and decay. The pending Privy Council case, James v. the Commonwealth, was referred to and discussed.

APPLE DRYING.

New Rapid Process.

In Nova Scotia, a new and improved method of drying Apples is being experimented with and its results will be watched with interest by canners in Canada and elsewhere.

The process is to grade, core and slice the Apples in the usual way, after which they pass through a dilute acid bath into an enclosed dryer in which they lie on slatted trays. Here they are dried for only three hours and the result is a high quality product, light in color and closely approximates fresh fruit when cooked.

If proved continuously successful, the quick drying process will be of great value to Apple growers and by-product manufacturers.

DRIED APRICOTS.

It was recently estimated that at Griffith there would be deliveries of over 200 tons of dried Apricots this season. A satisfactory demand is anticipated both for local sales and export. Substantial quantities are expected to go to New Zealand.

DRIED STONE FRUITS.

NEW SEASON'S PRICES SHOW SUBSTANTIAL INCREASE.

Strong Demand for Dried Apricots in U.K.

Prices for new season's dried Apricots, Nectarines and Peaches, announced by the Australian Dried Fruits Association, show increases over last season.

Apricots are 1½d. to 1¾d. per lb. higher than the opening prices of last season, according to classification and grade, Nectarines are ¾d. to 1½d. dearer, and increases in Peaches range from 1½d. to 1¾d. per lb.

Mr. W. N. Sumner, General Secretary of the A.D.F.A., states that the general rise in quotations of Apricots is due to the world market position of this fruit. A comparatively short crop in Australia has coincided with the general shortage in other producing countries, particularly in California, where light yields have been obtained for two years in succession. This has had the effect of raising prices in all markets.

A strong demand for dried Apricots exists in the United Kingdom. Prices determined for Australia have been based on what would be the equivalent return from other markets.

The increase in prices of Nectarines and Peaches is also in keeping with the overseas position of these fruits. Prices fixed by the Association for single box lots in the capital cities of the Commonwealth are as follows:—

Apricots.			
	Fancy.	Choice.	Standard.
28 lb. Boxes.	lb.	lb.	lb.
Four-crown	1/3	1/1	10½d.
Three-crown	1/1½	1/-	11½d.
Two-crown	1/-	11½d.	11½d.
One-crown	—	10½d.	10d.
Nectarines.			
Four-crown	1/-	10½d.	10½d.
Three-crown	10½d.	10d.	9½d.
Two-crown	10d.	9d.	8½d.
One-crown	—	7½d.	6½d.
Peaches.			
Four-crown	1/-	11d.	10½d.
Three-crown	11d.	10½d.	10d.
Two-crown	10d.	9½d.	9d.
One-crown	—	8d.	7½d.

The price of Apricot slabs is 11d. per lb., plain grade 10½d.; Nectarines, slabs and plain, 6½d.; and Peaches, slabs and plain, 7½d.

DRYING OF PEARS.

A Seasonable Operation.

THE WILLIAMS, Duchesse or Bartlett Pear is the only Pear dried commercially. The fruit should be held in boxes and the ripe fruit sorted for drying every few days. The fruit should be fully eating-ripe for drying. Very large Pears should be avoided as they take too long to dry.

The fruit should be cut in two and placed cut side upwards on the wooden drying trays, then sulphured. The Pear does not absorb the sulphur fumes readily, and to obtain a good colored article it is necessary to expose to the fumes for eighteen to 20 hours, sometimes necessitating re-charging the sulphur chamber after about 12 hours, using sulphur at the

rate of about 1 lb. to 200 cubic feet of space for each charge.

To test whether the Pear is sufficiently sulphured lift a fruit from a tray and feel the portion that was resting on the tray. If this portion is spongy it indicates that the fruit is sufficiently sulphured. If, on the other hand, hard portions are felt under the skin, the fruit should be replaced in the chamber and sulphured again.

When sulphuring is complete the trays of fruit are stacked in such a manner that the air will pass freely through the trays, the top tray being covered with an empty tray to shade it from the sun; or the trays may be placed on a drying rack and protected from the sun by the hessian curtains.

Pears wholly dried in the shade dry a pale, translucent color, which is preferred by the trade. If it is de-

CITRUS GROWERS!

COOPER'S

ALBOLEUM

(Emulsified White Oil)

is still the best, safest and most economical spraying oil on the Australian market

Prices have been again reduced

Obtainable from all Packing Sheds, Associations, etc.

Sole Manufacturers:

William Cooper and Nephews (Australia) Ltd.

4 O'CONNELL STREET, SYDNEY

Victorian Distributor: F. R. MELLOR, 440 Elizabeth St., Melbourne

DRIED FRUITS DEPARTMENT.

(Continued from p. 9)

sired to hasten drying, the fruit can be exposed to the sun by spreading the trays after the fruit is partially dried in the shade, but exposure to the sun in this way will result in a golden brown color.

Pears, being a very fleshy fruit, take four or five weeks to dry. When partially dry, drying can be completed in an evaporator. — "N.S.W. Weekly Agricultural Notes," 13/1/36.

PRUNES IN GERMANY.

Distribution Controlled by Government.

In order to avoid competition among buyers for the limited supplies of Yugoslav Prunes coming into Germany and to control their distribution, an organisation, known as Gedelag, has been formed in Germany representative of Government and dried fruit dealers and packers which will control imports of Prunes from any country.

On the basis of imports during the past three years, quotas will be introduced and importers will be allowed to dispose of 25 per cent. of imports, the remaining 75 per cent. will be distributed by the Gedelag according to fixed quotas, but of this quantity the importer will receive his allowed proportion.

HE HAD!

Freddie had been the guest of honor the day before at a party to which his little chum, George, had not been invited.

George said: "Have a good time?"

"Did I?" answered Freddie. "Why I'm not hungry yet."

WYETT'S 3 AND 4
STAR HAYSTACK
COVERS

FOR COVERING HAY, WOOL, WHEAT, LUCERNE, ETC. THE CHEAPEST COVER PROCURABLE. NOW FREE OF SALES TAX.

18,000 IN USE, GIVING EXCELLENT SERVICE!

NEW SEASON'S PRICES:

Size.	3-Star.	4-Star.
12 x 20ft.	£1 18 6	£2 16 6
12 x 24ft.	2 5 0	3 7 6
12 x 27ft.	2 13 0	3 13 6
12 x 30ft.	2 17 6	4 2 0
12 x 33ft.	3 2 0	4 9 6
18 x 20ft.	2 19 0	4 2 6
18 x 24ft.	3 13 6	4 19 6
18 x 27ft.	3 19 6	5 10 0
18 x 30ft.	4 6 0	6 1 0
18 x 33ft.	4 13 0	6 14 6
21 x 30ft.	4 19 6	6 19 6
21 x 33ft.	5 9 6	7 12 0
22 x 24ft.	4 10 6	6 3 6

Size 22 x 24ft. Waggon size only includes ropes. Other sizes, ropes 3/6 per cover extra if required.

CORIO SHEEP RUGS
RUG YOUR SHEEP AND
INCREASE YOUR PROFITS

Made in four sizes from strong, serviceable material.

Prices:

No. 1 (Lambs)	15/3 doz.
No. 2	16/- doz.
No. 3	16/6 doz.
No. 4	17/- doz.

Made by

WYETT MANUFACTURING
CO. PTY. LTD.
GEELONG, VIC.

At present Germany produces about 4,000 tons of Prunes and imports some 10,000 tons from European countries and a similar quantity from America, but on account of the partial failure of Apple and Pear crops in Germany and the scarcity of fats, it is anticipated that considerable quantities of Prunes will be imported during the coming year.

N.S.W. DRIED FRUITS CAMPAIGN

Increasing Australian Consumption.

That the N.S.W. Dried Fruits publicity campaigns have assisted in increasing public demand for this variety of fruit, Mr. A. E. Hammett, Publicity Representative, told a large audience at Temora recently.

In view of the fact that the Australian average consumption is only 13,000 tons yearly, necessitating the export of 60,000 tons in competition with Greece and Turkey, a greater domestic consumption must, in some way, be brought about and the current campaign aims at doubling the present local consumption. Last year 2,000 tons extra were consumed as a result of similar publicity.

The A.D.F.A. is to be commended upon its consistent efforts to create a greater interest in dried fruits in Australia and that its efforts in all States has already been beneficial to the industry is not only a matter of congratulation, but an augury that a continuance of sound educational publicity will achieve even better results.

"FRUIT WORLD ANNUAL."

Valuable Publication Now Issued for 1936.

THE FRUIT WORLD ANNUAL for 1936 is now published. This Annual is up to its usual high standard of excellence, and many appreciations have already been received regarding both the cultural and statistical information contained therein.

With regard to cultural information, colored charts are included, showing over fifty of the principal insect pests and plant diseases, together with the latest known scientific methods of control. The Annual is thus a publication for daily reference, and will be kept on file for this feature alone.

Articles are also included, as follows — "Fruitgrowing in Australia," with statistical information from every State, showing area and production of all fruits; "Manures in the Orchard," by F. M. Read, M.Ag.Sc.; "Research Work on the Cool Storage of Fruit," by G. B. Tindale, B.Ag.Sc.; "Modern Cultural Knowledge," by D. H. Case, B.Ag.Sc.; "The Australian Canned Fruits Industry"; "Australiar and New Zealand Fruit Export," with comparative statistics; "The Dried Fruits Industry," giving statistics of area and production over a period of years; Packing Charts for Apples, Pears, Oranges, Tomatoes and Grapes. Lists are given of the Fruitgrowers' Associations throughout Australia, Cool Stores throughout Australia and New Zealand; Dried Fruits Packing Sheds, and the principal fruit and jam manufacturers throughout Australia.

Among the trade items are included articles regarding Fruit Marketing in Australia, and comparative figures dealing with all phases of fruit production and distribution.

"The Fruit World Annual" has met a distinct need in this connection, growers and all associated with the industry will find the "Annual" to be a mine of information.

Copies have been posted direct to subscribers; additional copies are available at 1/6, plus 2d. postage, from the Fruit World Pty. Ltd., Box 1944, G.P.O., Melbourne, or 439 Kent-street, Sydney.

ADVERTISING APPLES IN
QUEENSLAND

Posters ∴ Window Displays ∴ Lectures to
School Children ∴ Broadcasting

Appreciated Activity of Committee of Direction of Fruit Marketing

IN AN ENDEAVOUR to assist in organising to achieve greater consumption of Apples in Australia, the Australian Apple and Pear Export Council made its services available to launch the movement.

In response to a request as to what is being done in the several States the following interesting information is to hand from the Committee of Direction of Fruit Marketing, Brisbane:

Throughout the year, states the C.O.D., we have a continuous programme of advertising which incorporates all varieties of fruits grown as they come into season.

In regard to deciduous fruits; this is done by means of a poster, which has been distributed to practically every retailer in Queensland, and sent to every school in the State, and is the subject of a lesson by the various school masters.

In the schools, drawing lessons are given from the posters, and, thus, there is instilled in the minds of the children the idea of the various fruits under review.

We have received many favorable comments on this poster and the others which we have issued, and undoubtedly these are doing excellent work. Their success is further amplified by our experience with a Pine-apple poster. This poster was sent to all the schools in N.S.W., Victoria and South Australia. Teachers noticed that the poster was No. 12 of a series, and we subsequently received hundreds of letters asking for copies of the previous issues.

With the permission of the Educational Department, lecturettes are prepared and issued to the various schools, and are the basis of an address to the children. A copy of the last one issued is attached. (Details published elsewhere in this issue.—Ed., "F.W.")

Attractive cards, urging the public to buy Apples, are issued to retailers,

and these are displayed in the shops, and meet the eye of the purchaser when entering to buy.

During periods of over-supply we avail ourselves of broadcasting facilities, and an appeal is made to the public to purchase the particular varieties that are glutted.

In conjunction with the Department of Agriculture and the Stock and the Railway Department, we inaugurated at the beginning of this year a distribution scheme for the supply of fresh fruit and vegetables to the country centres. This scheme provides for the supply of certain varieties in half bushel cases at a freight charge of 1/- per case to all parts of Queensland. The scheme is advertised by means of posters at every railway station, showing the varieties available and the prices at which they can be purchased, and this has proved a very great success indeed.

One of the main features of this scheme is the arrangement whereby the station master collects the orders, together with cost involved. The orders are then telegraphed through the railway system to us in Brisbane, and, wherever possible, the orders are handed direct to growers for execution.

One of the posters displayed in connection with this scheme is being posted under separate cover, from which it will be gathered that it is essentially a "grower to consumer scheme."

[The details of this poster were published in January "Fruit World," page 35.]

Apples have proved to be nearly 50 per cent. of the varieties supplied, and by strict supervision in the packing of the fruit forwarded, the scheme advertises itself by one satisfied person relaying his experience to his neighbour, and in this manner inexpensive publicity is obtained.



No. 9 Spraying Machine

The Most Extensive
Manufacturers in the
British Empire of

RUBBER
STAMPS

Stencils, Marking Devices,
Inks & Acme Stamp Pads.

We make a Big Range of Special
Fruit Case Marking Sets

We also Manufacture and Supply
Spraying Machines
for All Purposes.

Let us know your requirements, and we will
quote you. Ask for Spraying Equipment Price List

EXCELSIOR SUPPLY CO. LTD.

160 George St. West,
SYDNEY, N.S.W.

278 Post Office Place,
MELBOURNE, VIC.

'Ecco House,' 50-52 Victoria St., WELLINGTON, N.Z.

What Our Readers Are Thinking

Fruitgrowers and others connected with the industry are invited to contribute their views to the "Fruit World & Market Grower" under this heading.

This paper does not necessarily identify itself with the views here expressed, and reserves the right to reject or curtail, if necessary, any articles submitted.

CO-OPERATION AND THE MARKETING ACT :: IMPORTANCE OF THE PROCESSING OF LOWER-GRADE FRUIT :: WHAT IS A REASONABLE SELLING PRICE FOR APPLES :: CO-OPERATION NEEDED BETWEEN GROWER, DISTRIBUTOR AND THE PUBLIC

"Tyabb (Vic.) Grower" sends us the following notes:—

Co-operation and the Marketing Act.

Some years back there was a fair amount of discussion as to an orchard tax of 1/- per acre, which, on an average crop, would have cost about 1/17th of a penny per case.

At that time most orchardists were reasonably prosperous, but nowadays it has to be realised that we are dealing with a different world.

"Individualism" has its advantages, no doubt, but "co-operation" in every sphere is now realised as essential to success.

Sir Herbert Gepp has recently pointed out—"Farmers would have to be prepared to submit to a measure of inspection and control . . . They would also have to take broad views. Their occupation made them individualists, but, if marketing control was to solve their difficulties there would have to be a true co-operative spirit in support of marketing authority."

Recently some striking articles have been published in the "Argus," showing the amazing results which have been achieved in Denmark through efficiency and co-operation. Denmark has a population of only 3,700,000, and yet she supplies 28 per cent. of the butter on the world's market and 50 per cent. of the bacon.

Australia recently had a visit from Dr. Kagawa, a saint, who chose to live in a room 6 feet x 6 feet in the midst of the worst slum district in Japan, but also had such a statesman-like mind that he was chosen to solve the problem of the unemployed.

And it is of special interest that he is making the

forming of co-operatives

among various types of people in various occupations a part of his great "Kingdom of God movement."

In Australia, a few years ago, any scheme for organised marketing (whether overseas or home) instantly met with bitter opposition.

It is probable though that most orchardists have now come to the point when they realise that free and easy or go-as-you-please methods are not good enough to meet the present situation, and are therefore willing to consider any scheme with a view to seeing whether it can be improved where necessary, and made workable.

Sale of Inferior Fruit.

Mr. Frank Moore some time ago urged that the Vegetation Diseases Act should be amended so that the fact that inferior fruit is found on a truck (unless it can be definitely proved to be for "processing" or other allowable uses) should be deemed sufficient evidence for launching a prosecution.

If, as at present, it is necessary to prove there has been an actual sale before any conviction can be obtained, it is evident that numerous loopholes for evasion are available, and the Act in many cases rendered useless.

Any schemes for processing in various ways second-grade fruit—such as those put in hand through

the Victoria Mark Company—would be of great help to the industry.

"Confession," or "owning-up," is said to be good for the soul, and the present writer owns to having sold some second-grade fruit (for hawk-ing) last season.

Though, as is usual where such fruit is purchased, it was kept entirely free from codlin grub. As a matter of fact, most of the Apples were good, but 2½ inches, which these days is considered too small.

Nevertheless, when later on an opportunity arose to sell the same class of fruit for processing at a lower figure, it was gladly transferred to that destination.

Because, one realises that while poor-looking fruit tends to create a distaste for fruit, nice-looking fruit encourages (progressively) the desire for fruit.

("Nice-looking fruit" raises the point though whether the standard aimed at should be that of well-colored Apples, free from any noticeable blemish, or "show standard.")

One realises, too, that a case of fruit sold at, say, 1/6 probably prevents a sale of some other case at, say, 4/6.

Which leads up to another point, the **reasonable selling price**

for fruit. The figure 4/6 was mentioned, for fruit sold in Melbourne (and without any cool storage or other additional expenses), because in the case of an orchardist paying 1/- for the carting to and selling of his fruit in the Queen Victoria Market, that would leave 3/6 clear.

To take the case of a small orchard averaging, say, 2,000 cases per year; that would give £350. Deduct from that for orchard expenses £100 to £150 (though that figure would probably not include an allowance for interest on capital invested, or, alter-

natively, any kind of repayment), and a reasonable (though certainly moderate) living would probably be assured the grower for his usually far longer than "8-hour day."

Nowadays it has suddenly been realised that neither nations nor individuals can look at things from a selfish point of view. Firstly, it isn't right, and, secondly, it doesn't even pay! So in fruitgrowing — (1) the fruitgrower should have a reasonable return for his work, but (2) the consumer should be able to buy good fruit at a reasonable figure. (Query, say, 3d. a lb.), and (3) the retailer should also be able to earn a reasonable living.

From the point of view of the grower and the consumer it would probably be granted that a large consumption at a reasonable figure is desired.

One or two queries then arise to which the present writer doesn't know the answer. (1) Whether there is any tendency for the retailer to prefer a more restricted sale at a higher price? (2) Whether, provided the shopkeeper could rely on being given a reliable article, it would be possible to work on a lower percentage of profit, e.g., if fruit is purchased at 4/6 per case, or just under 2d. per lb., it would be possible to sell at 3d. per lb.?

If this resulted in larger sales that would, to some extent, make up for smaller profits on each sale.

A few years ago some of us were inclined to see hopes in schemes for "direct distribution," but it appears doubtful whether most of the general

public are open to buying in what they consider "bulk," so that a retailer is a necessity.

(At this point the fruiterer either: (1) rises and bows, or (2) throws a rotten Tomato at the writer, according to how he "reacts" to this statement.)

To ensure happiness, though, the grower, the consumer, and the "middleman" should be acting efficiently and co-operatively, and not solely for their own ends.

THE VEGETABLE CATERPILLAR.

This is the name given to the fungus—*Cordyceps robertsii*—found in New Zealand. It exhibits a curious and mysterious combination of animal and vegetable life, and is invariably found associated as a parasite with the bulrush caterpillar. How the spores of the fungus enter the insect—which has never yet been met with as a grub or moth—is not certainly known. It is thought that they get lodged in its neck as it buries itself. The fungus springs from the head of the buried insect, and gradually absorbs its inside till the whole body becomes full of purely vegetable tissue, though in outward appearance it remains unchanged, head, legs and claws being seen clearly in detail. The pulpy vegetable matter has a nutty flavor, and is eaten with relish by pigs, and greedily devoured by the Maori wood hen. The fungus, after growing to a height of about 6 inches, dies and dries up.



OUTSIZE JAPANESE PLUMS.

Some huge Plums were recently exhibited by a George Street, Sydney, florist, and attracted much attention. Some reached 8½ inches in circumference. They were grown in the garden of Mr. J. Archbold, of Roseville, from seedlings obtained from Japan.



Love's Labor Lost

The practical orchardist knows how true is the phrase "Love's Labor Lost" if fruit for export is labelled "Not up to standard." The experience of thousands of growers has proved that Gargoyle White Spraying Oil is the most effective of all sprays as a check to reinfestation.

A safe spray for trees in full foliage; Gargoyle White Spraying Oil ensures effective protection against reinfestation over long periods.

VACUUM OIL COMPANY PTY. LTD.

Now is the time to Spray with—

Gargoyle WHITE Spraying Oil

Make certain of

A Good Cover Crop

by

Sowing with

Sulphate of Ammonia

in addition to SUPER

Ask for

1 & 1 or 2 & 1 Super & Ammonia

SULPHATE of AMMONIA
is INDISPENSABLE in a
WELL-KEPT ORCHARD

H1/36

Letters to the Editor

Black Spot Spraying

(The Editor, "Fruit World and Market Grower.")

Sir,—In your valuable paper, "The Fruit World," of November 8, 1935, I notice several articles on the control of black spot on Apples and Pears. After going through these it is most astonishing that so little is known by our experts and horticulturists of how to deal with this trouble.

If the writers of the articles mentioned above will read my letter in the "Fruit World" of August 1, 1935, and act upon it the black spot will not give them any more trouble or concern; the cost is light, and becomes lighter as you get the spot under control.

I must here state the trees must be thoroughly sprayed. I don't believe in the nozzle that throws only a fine mist. I always used the Bordeaux nozzle known in Tasmania as Webster's; one you can change to coarse or fine as needed.

The writer on page 15 mentions climatic conditions and high humidity after rain, but these need not trouble him, as I sprayed all one afternoon in a drizzly rain, and it rained heavily all night and part of next day, and it was left at that, and no spot showed on this portion; it was as clean as the rest of the orchard.

In my opinion, there is far too much spraying done. I noticed in a fruit paper, a Chief Horticulturist advises the following for spot control on Pears—No. 1 green tip stage, No. 2 pink stage, No. 3 calyx, No. 4 a later application, and the whole four are Bordeaux sprays of different strengths.

I contend that all the spray put on before the calyx opens and after it closes is a waste of time and material.

Why all these sprayings, when one will do, with no danger of late spot?

There is just one other item. In the article on page 12 where

15-10-100 Bordeaux

is mentioned, may I here state, that a spray of this kind is valueless. I have experimented with unequal quantities in the calyx stage, and found the result bad; and those heavy spray-

ings of Bordeaux do more harm than good.

I here state emphatically that the unequal quantities of lime and blue-stone are valueless in the control of black spot—there is no danger of destroying the crop when spraying with Bordeaux in the calyx stage, and when the fruit shows any russetting it can be reduced from 4-4-40 to 2-2-40, or even less.

All those heavy sprayings of Bordeaux, lime and sulphur and oils must sicken the trees; I kept my orchard clean of scale, etc., with crude petroleum and soft soap (home-made)—a very inexpensive spray—put on once in three or four years when the trees were dormant.

On top of all the sprays mentioned heretofore are all the codlin moth sprays, etc.

There is a danger in over-spraying and over-manuring. I have seen bad results through both.

Growers complain of the high cost of production, and, no wonder, if they have to follow all the instructions of the experts, as I noticed where one gave a list of sprays—which were only twelve for one season!—and the control of black spot and scale should be less than two. — J. H. Jacklyn.

Brisbane, 1/1/36.

Fruit Export to U.K.

(The Editor, "Fruit World.")

Sir,—On several occasions recently statements have been published that Australia and New Zealand neglect the markets of the North of England and Scotland.

Within economic distance of 100 miles round London there are 20,000,000 people, nearly half the population of Great Britain. The balance of the population is distributed around such centres as Liverpool, Manchester, Hull, Cardiff, Glasgow and Newcastle, each with its own proportion.

Besides this all the large fashionable seaside resorts of the South of England obtain their supplies from London, and London is also the city where vast numbers of tourists make their headquarters, and these tourists want all goods of prime quality.

If goods are sold out here to merchants in those centres, of course, they should be sent direct to their ports, but that is the point; their merchants expect the exporter to take all risks, whereas London merchants buy outright and take the risks themselves.

If it is a matter for sending goods for sale on an open market, the one and only sure market is London, where goods if not required locally can be despatched to any part of the Kingdom, where they are wanted at any particular time.—I am, sir, yours faithfully, A. W. Pearse, Representative, Port of London Authority.

Sydney, 10/1/36.

Passion Fruit Storage.—In response to an enquirer regarding Passionfruit in cold storage, Mr. G. B. Tindale, B.Agr.Sc., Cold Storage Research Officer, Victorian Dept. of Agriculture, advised as follows:—

Re the gas storage of Passionfruit—using flue gases. The experiments referred to in your article in your August issue were apparently carried out by a private firm in Sydney, and we have no knowledge of the details.

In our experiment here with Passionfruit under normal cold storage conditions, we find that they develop skin breakdown if held at low temperatures. They appear to require a temperature not below 45 degrees F. Their storage life is very short, and does not exceed four weeks.

PORT of LONDON

The World's Best Fruit Market

Sales can always be depended
on for best quality fruit at
highest prices.

Besides its own vast population, LONDON supplies the seaside resorts. Tourists make their headquarters in LONDON and want the best fruit.

LONDON has always been the centre of the Australian and New Zealand fruit trade, and although many efforts have been made to divert it to other ports, the presence of its huge local market with expert distribution agencies will ensure it remaining so.

LONDON is an INTERNATIONAL MARKET where the WORLD'S BUYERS congregate, and where the highest prices for best produce are always obtained.

All particulars as regards charges, etc., can be obtained from:

Capt. A. W. Pearse, Port of London Authority, 22 Loftus St., Sydney

Interstate News & Notes



New South Wales

CROP REPORT.

THE MONTHLY FRUIT CROP report received from the N.S.W. Department of Agriculture on January 15, 1936, gives the following details:—

Apples.

On the Murrumbidgee Irrigation Area some reduction in the Apple crop was caused by winds; generally yields should be medium to heavy—some orchards light.

In the Armidale district, Granny and Dels. were reduced by winds, and the size of Grays. adversely affected by dry conditions during December. Mostly light crops in prospect in the Orange and Young districts. Quantities of Apples coming forward from coastal orchards a good size; fruit bringing satisfactory prices.

Some heavy yields of Pears are expected in the Griffith portion of M.I.A., and at Leeton medium to good crops are in sight. Other inland districts moderate to good. Around Armidale the dry weather retarded growth of Williams.

Heavy crops of Cherries were general this season, and in some districts they attained record proportions.

Heavy crops of Apricots harvested on M.I.A. Large quantities dried.

Citrus:

The Navel crop at Griffith appears to have set lightly. At Leeton original setting heavy, but subsequent shedding reduced prospective yields.

In coastal groves the young main crop Navels are still falling.

It is expected that during February the State Marketing Bureau will review the citrus crop throughout the State, and issue a forecast of yield and a survey of conditions.

Bananas:

Generally medium to heavy marketings indicated for January. Around Lismore, a number of the 1933-34 plantations expected to yield heavily. Hail damage reported from the Tweed Heads and some of the other areas.

Passionfruit:

Very light crop for January indicated in the Lismore district. Very good yields in the Federal and Coorabell localities.

The summer crop is good in the County of Cumberland, while the Easter crop prospects are fair.

ORCHARD REGISTRATION IN N.S.W.

February 28 is the Closing Date.

THE REGISTRATION OF ORCHARDS and nurseries in N.S.W. is compulsory under the Plant Diseases Act of 1924. February 28 is the latest date for registration to avoid penalty.

On behalf of the Minister for Agriculture, Mr. J. B. Shand, M.L.A., points out that a penalty of up to £50 is provided for non-registration. All persons who are either owners or occupiers of orchards and nurseries, should see, therefore, that registration is effected in time.

Last year the Department was compelled to prosecute numerous growers for failure to register. Orchards of less than a quarter of an acre in area are exempt from registration, unless they contain a Banana, Plantain, or Manila hemp plant, in which case there is no exemption.

The registration fee of 1/- per acre (or portion thereof) should be forwarded either to the Under-Secretary Department of Agriculture, Box 36A, G.P.O., Sydney, or to the nearest clerk of petty sessions. Registration forms and any further particulars can be obtained on application to the Department.

Apricots on M.I.A. Exceptionally Good Crops

THE APRICOT CROP in the Murrumbidgee Irrigation Areas this season was the most successful in the history of the settlement, the crop is estimated at around 6,000 tons, to the value of £60,000. Growers are being paid £12 per ton for canning Apricots and £8 per ton for jam fruit.

The Griffith Producers' Co-op. received nearly 850 tons for despatch to Leeton and Sydney canneries, an increase of more than 130 tons over last season. Nothing superior has been seen than the quality this season.

The "Gods" of War

A very interesting and instructive lecture was given by Mr. P. L. Cantwell, a student of world politics, to the members of the N.S.W. Chamber of Fruit and Vegetable Industries at their monthly luncheon at Marcus Clark's recently. Many well-known figures in the trade were present, and the speaker was given a hearty round of applause at the conclusion of his address. Mr. Cantwell placed the cause of war on the shoulders of the makers of munitions, whose ramifications were world-wide, and who by the aid of newspapers owned by the combine of armament manufacturers, and the use of other propaganda, incited the nations against one another. Several names well known in world politics were mentioned as being large shareholders in munition works in various parts of the world, and their activities in urging on war, was often hidden by speeches on disarmament delivered by those in their pay.

Among the statements made by the speaker was one relating to the recent Sino-Japanese war, in which China fought Japan with rifles and ammunition supplied by the Japanese. Vickers Ltd., of England, supplied the munitions for both Russia and Japan when those countries were at war, and several other instances were related of countries supplying munitions which were used against themselves. France, he said, were the leading armament makers, and spent more money on armaments than any other nation. French firms also had big interests in 209 munition works outside of France. Germany after the war was secretly armed from works situated in Switzerland, before openly manufacturing her own. China, he stated, was the largest importer of arms in the world today, and most of it was supplied by Mitsui, of Japan.

Colonel Herrod, in moving a vote of thanks to the speaker, said the lecture had provided food for thought, and Mr. A. C. Ward, of Ward and Felton, in supporting the vote, said they were indebted to the speaker for the compilation of facts that exposed the underground forces that conspired for the destruction of mankind.

ALBOLEUM.

Alboleum is a specially prepared emulsified white oil, which is readily miscible with water, and can be used with safety on all classes of trees, shrubs and plants in leaf.

It is primarily designed for the control of scale pests on fruit trees, and is particularly valuable for use on citrus. Alboleum is also useful for the control of red spider (Bryobia), Aphis, Thrips, Mealy Bug, etc., and in addition it acts as a tonic to the tree or shrub, and assists in the prevention of Mildews.

Alboleum may be used in combination with Bordinette, Arsinette, Nicotine, Katakilla, etc., but should never be used with sulphur in any form, or with sprays containing sulphur.

Dilutions vary according to the class of pest to be controlled, and the nature of the host plant, but generally 1—50 is the standard dilution for scale pests and from 1-60 to 1-100 for softer bodied insects. For work under glass, 1-100 to 1-150 will be found sufficient.

SPRAY HOSE

**BURST PROOF
ALL RED**

HAND-MADE

BY

**HARDIE
RUBBER
CO. LTD.**

"EVERY INCH AUSTRALIAN"

Obtainable at All Stores.

SYDNEY ROYAL SHOW.

The Royal Easter Show at Moore Park, Sydney, will open this year on Monday, April 6, and will continue until Wednesday, April 15. Entries in fruit sections will close on Friday, March 6. Special prizes to the value of £180 will be provided for the District Collection of Apples and £50 for District Collection of Pears. The Royal Special Export Apple prizes are: 1st £10, 2nd £5, 3rd £2. A silver cup presented by the Orient steamship Co. will also be awarded to the first prize winner for export Apples.

PASSION FRUIT IN N.S.W.

At Brunswick Heads, on the North Coast of N.S.W., one of the largest Passionfruit plantations in the State is that planted by Mr. T. W. Rea. This plantation has recently been sold to two Melbourne companies. Mr. Rea has been appointed plantation manager. The vines grow between Bananas covering an area of 28 acres, and there are 30 miles of trellis. Late Beans make a third crop on the area.

IMPORTANCE OF DRAINAGE.

Free Departmental Pamphlet.

Whilst effective drainage is beneficial to all land intended for cropping, it is absolutely necessary in certain areas. Generally those who purchase sites for orchards choose land which is naturally well drained, but even then there are some areas which drainage would greatly improve. A better knowledge of the great benefits resultant from good drainage would lead growers to undertake the drainage of some, if not all, of their orchard lands. Effective drainage results in improved conditions in respect to soil, air and water, with resultant benefits to the vegetation involved; drainage, therefore, if properly carried out, improves the potential productivity of the soil and enhances the value of the affected land.

An illustrated pamphlet on "Farm Drainage and Swamp Reclamation" is obtainable free on application to the Department of Agriculture, Box 36A, G.P.O., Sydney.

ROYAL EASTER SHOW

6th to 15th APRIL, 1936

£16,000 in Prize Money - Entries Close in Sections

Section.	Date.
PRINT BUTTER (Class 1647)	Monday, 10th February
BUTTER (Export Class 1641)	Tuesday, 18th February
BUTTER (Classes 1645 and 1646)	Friday, 6th March
FAT LAMB CARCASSES	Saturday, 29th February
WINES	Monday, 2nd March
HORSES (including Trotting Events)	Saturday, 29th February
CATTLE	Monday, 2nd March
PIGS	Monday, 2nd March
POULTRY	Friday, 6th March
PIGEONS	Saturday, 7th March
CANARIES AND CAGE BIRDS	Saturday, 7th March
DOGS	Saturday, 7th March
CATS	Monday, 9th March
AGRICULTURE (including Fruit and Apiculture)	Monday, 9th March
JUNIOR FARMERS' SECTION	Friday, 6th March
DAIRY PRODUCE (unless otherwise stated)	Monday, 2nd March
STUDENTS' JUDGING COMPETITION	Friday, 6th March
MISCELLANEOUS	Friday, 28th February
WOOD-CHOPPING & SAWING CONTESTS	Tuesday, 10th March
HORTICULTURE	Monday, 16th March
	Friday, 3rd April, and as stated

PATENTS GEORGE A. UREN

PATENT ATTORNEY

HEATY HOUSE, 499 LITTLE COLLINS ST. MELBOURNE.

Grape Packing for Local Trade and Export

(By F. de Castella, Viticulturist, and B. P. Krone, Fruit Packing Expert.)

(Reprinted by courtesy from the "Journal of the Department of Agriculture of Victoria.")

EACH SEASON large quantities of table Grapes arrive on the Melbourne market in faulty condition. Thousands of cases of what appeared on the vine to be good fruit open up wet and unsaleable, ultimately finding their way to the distillery at a price that does not pay for cases and freight.

Excessive watering reduces the keeping quality of the fruit. To market Grapes shortly after rain or after a watering is courting failure. Odd, watery berries, with thin skins, burst when the case is nailed down, with disastrous results to the rest of the case.

For the Victorian market, Waltham Cross (Rosaki) is by far the most popular Grape, although the varieties Gordo Blanco (Muscatel), Black Prince, Red Prince, Red May, Purple Cornichon, and late in the season,

able. Leaf stalks growing through a bunch often result in injury with careless pickers. The bunches should be held by the stalks, handled as little as possible, and placed in the dip tin in a single layer, with stalks slanting upwards.

Picking can best be done the day before packing and after the great heat of the day. Resting overnight renders the Grapes tougher and less brittle, and therefore less liable to injury during packing.

The packing shed is a frequent source of mould infection. It should be kept as aseptic as possible by careful removal of all traces of damaged berries, etc. Floors, walls, and fittings should be liberally swabbed from time to time with a 2 per cent. bluestone solution.

Bunches must be so packed that there will be no movement of the fruit



The Long Bushel case, shown in the accompanying illustration, with the side removed showing the effect of the system of packing adopted. Grapes only can be seen; all stalks are hidden.

Ohanez, are in good demand. For export, the only really satisfactory Grape is the Ohanez, although some recent introductions show promise.

Grapes picked or forwarded in very hot weather carry unsatisfactorily. They often reach market during the subsequent cool spell, when Grapes are not in demand, and prices slump badly. It would be well to withhold consignments during a pronounced heat wave.

On no account should Grapes be picked until they comply with the departmental Maturity Standard, fixed at s.g. 1.075 or 10 degrees Baumé. Unlike many other fruits, Grapes do not ripen after removal from the vine. Regulations concerning Grape standards must also be complied with.

Careful picking is essential. "Dip tins," into which Grapes are often picked, may damage berries through the edges of the holes being burred—lining with paper is therefore advis-

while in the package. The slightest movement or shaking of the bunches is fatal.

In the packing shed it will probably take three trimmers to keep each packer going. All depends on the amount of trimming to be done, and care in this direction often decides the difference in grade designation of the package—whether "Special Quality" or "Second Grade." Bad trimming may materially lessen the growers' returns from otherwise high-quality fruit.

Packing for the Local Market.

The favorite Grape pack for the Melbourne market is the long (bushel) case, 26 inches x 14½ inches x 6 inches, internal measurements, clear of central partition. The half-bushel (long) case (26 x 7½ x 6 inches) is used also. The Grape case (export), 24-5/16 x 12½ x 6½ inches, may also be used; its capacity is 1,975 cubic inches, or



The Long Bushel case indicating the height Grapes should be before dumping and nailing on the lid. If possible defer the latter for some hours, allowing for shrinkage and settling of the Grapes.

rather more than three-quarter bushel (0.889 Imperial bushel).

Various punnet and carton packs, several of these small units being contained in a crate or case, are coming into use. These are not meeting with the favor they seem to merit. The self-contained unit that would reach the consumer without rehandling should be an ideal pack.

The following instructions apply more particularly to the long bushel case. Though this usually is said to hold 40 lbs. of Grapes, it really holds more. It should contain, as a rule, 50 to 55 lbs.; indeed, with good quality Grapes, 60 lbs. can sometimes be packed in. The weight varies with the packer, with the tightness of the pack, and with the Baumé gravity of the Grape juice.

Some good packers pick on to hesian, on the shady side of the vine in the afternoon; the actual packing being done very early the following morning. Others provisionally fill the cases in the evening, piling the Grapes higher than the sides of the case. By next morning they will have shrunk very much, so that additional Grapes may be needed to fill the case completely.

Careful trimming is essential. All under-sized or damaged berries must be removed with a blunt-pointed secateur, the bunch being held by the stalk to avoid damage and conserve bloom. Small, sound bunchlets should be kept apart for the final filling before nailing down.

Line cases with clean white paper. Pack tightly; the security of the pack lies in its "snugness." Slack packing means damaged and wet Grapes. Remember that, though the case is packed with the narrow side open, it is inspected on its wide side. Pack in such a way that when a lath is removed nothing is seen but an even mass of berries, with no stalks showing.

The "Pyramid" pack is recommended, as it ensures even and sufficient pressure. Briefly, this means commencing the pack with rows of bunches along each side, their points in the corners and stalks inwards.

The third row is placed slightly above and between the first two, thus ensuring tightness by a kind of wedge action—so on until the case is filled, with occasional gentle dumping or shaking. Such general directions may, of course, need modification to suit the size of the bunches.

Do not nail down until the last possible moment; full advantage can thus be taken of natural shrinkage. After the final filling, the Grapes should be about 1½ inches above the sides of the case.

Stack cases on the flat; never on the narrow side. Stack in trucks with cases overlapping to permit air circulation.

Packing for Export.

For export large bunches are desirable. They should not, therefore, be broken up into several smaller bunches. For export, anything smaller than a 50-berry or 8-oz. bunch should not be packed.

The Grapes should be graded; remember that they will have to compete with foreign fruit. Grading is easily accomplished. Begin by selecting prime bunches with large-sized berries. Reject excessively tight bunches; they spoil a good pack.

There are two radically different ways of packing Grapes for export—

(a) The cork-filler pack.

(b) The paper and wood-wool pack.

Both permit of Grapes being kept in good condition for several months in cool store. The first method has been in use for many years at Almeria (Spain), the latter being of more recent introduction. The paper and wood-wool pack is almost exclusively used for South African Grape shipments. Its chief advantages are cheapness and absence of dust when the Grapes are opened up.

Quite different packages are used for these two packs.

The Cork-Filler Pack.

The filler is really granulated cork, free from dust. The particles must not be too small; rather coarse filler—about dried pea size—preserves the Grapes better than that which is finer.

In California a somewhat similar pack is used largely with satisfactory results, coarse sawdust free from dust being employed instead of cork.

The chief features of the cork pack, as regards safe carriage over long distances, seem to be the rigidity or freedom from springiness of the timber used, and the insulating qualities or capacity for excluding air.

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Grapes packed with granulated cork-filler.

(Blocks courtesy "Vic. Journal of Agriculture.")

The Grape, unlike most fruit, does not require ventilation during transit, hence a close-fitting container (case, barrel, or drum) suits it best. Barrels (as used in Spain) are of prohibitive price here, but the cases used in lieu of them should have boards that fit as tightly as possible and are not flimsy and weak. The dimensions of the approved Ohanez export Grape case are 24-5/16 inches x 12 1/2 inches x 6 1/2 inches, internal measurements, clear of the centre partition, i.e., nearly nine-tenths of a bushel.

This case holds about 27 lb. Grapes, and nearly 5 lb. cork. Three bales, each weighing approximately 150 to 160 lb., are sufficient for 100 cases. Obviously, the more Grapes, the less filler. The filler must not be skimmed or keeping quality will suffer. A little over 28 lb. of Grapes should be packed, so that 27 lb. net may be guaranteed at destination. Beginners would do well, for the first case or two, to weigh Grapes and cork for each compartment. A measure holding 2 1/2 lb. cork will be found convenient.

The cases usually are lined with paper cut to size, but this is not indis-

of cork through the bunches. Repeat the layer of Grapes, and finish up with a good layer of cork on top.

3. The cork should be heaped slightly above the sides, so that slight pressure must be applied before the case can be nailed down. It is essential that the fruit be tightly packed with plenty of cork. When the case is opened, only cork should be seen, all Grapes being buried in it.

4. Cleats beneath the ends of each case, or other forms of insulator, should be used to provide free air circulation throughout the stack of cases during storage.

The Paper and Wood-Wool Pack.

This style denotes a high-class article, and Grapes of first quality only should be used. For this pack the 10-lb. Grape tray or box is most suitable. The dimensions are (internal measurement) 18 inches x 11 1/2 inches, with a depth varying from 4 inches to 5 inches, according to the size of the bunches.*

The case is made on the flat, to form a tray. This case holds 10 lb. net of Grapes or more, according to depth. When packed, this net weight should be somewhat exceeded; the

The 10-lb. Grape tray thus contains rather more than 10 lb. of Grapes and one penny halfpenny (1 1/2d.) worth of paper and wood-wool.

Place on the bottom of the tray a generous layer of well-teased wood-wool, drawing it up around the sides and end of the tray, so that the Grapes will not touch these. The paper should be folded or semi-twisted beneath each bunch when it is wrapped. Bunches should be placed closely together, with just a thin wall



The same box as shown on left with paper torn back to reveal the bunches.

of wood-wool surrounding each, sufficient to prevent movement or shaking in transit. A generous layer of wood-wool over the tops of the bunches completes the packing.

Sulphur Di-Oxide Treatment.

This method for prolonging the storage life of Grapes, is now extensively applied in California, where no less than 175,000 tons of fresh Grapes were subjected to it last year, before being railled to their destinations.

Sulphur dioxide (SO₂), often popularly termed sulphur fumes, is the gas formed when sulphur is burnt in air. This antiseptic, in the proportion of about 50 parts per million, retards development of moulds and decay, thus reducing the rate of deterioration to about half that of untreated Grapes, while it does not appreciably affect color, texture or flavor.

If the Grapes, packed in porous containers, are exposed to air containing 2 per cent. by volume of SO₂, for 20 to 30 minutes, they will absorb from 50 to 100 parts per million of the gas. Various factors affect the rate of absorption; it is more rapid with Grapes that are on the green side; warm and somewhat damaged

which can be accomplished in about 10 minutes with a suitable outfit. The SO₂ may be produced by burning sulphur in a special apparatus, or, better, by vaporising liquid SO₂, as supplied in steel cylinders. In either case fans or blowers regulate and ensure a proper mixture.

Where Grapes are packed in close-fitting cases, with cork or sawdust filler, fumigation with SO₂ is not possible. In such instances treatment of the Grapes before packing was tried, but with rather unsatisfactory results. An ingenious modification that has recently been devised consists in the mixing of finely-powdered bisulphite of potash of soda with the filler, at the rate of about seven grains for each pound of Grapes in the case. This has proved quite satisfactory.

In any preliminary trials of this method, it might be advisable not to exceed five grains for each pound of Grapes in the case.

*Should the size of the bunches necessitate the use of a tray of greater depth than four inches, approval for its use must be obtained from the Department of Commerce. Application for such approval must be made to the Department of Agriculture.



A ten-pound Grape tray with a single layer of bunches wrapped in sulphite paper and packed in wood-wool.

pensable. Clips should be used to avoid tearing by wind.

1. The case is packed with its broad side open. Spread a fairly thick (1 to 1 1/2 inch) layer of cork on the bottom; spread over it a layer of bunches, fitting them reasonably close together. Handle only by the stalks. Bunches should not fit too closely to sides and ends of case; leave space for cork.

2. Spread a layer of cork over the Grapes and shake to settle the grains

extra weight is desirable, to allow for shrinkage during transit.

The Grapes are wrapped in "sulphite" tissue wrapping paper in sheets 15 inches x 15 inches, one sheet being used for each bunch. The wrapped bunches are bedded in, and consolidated in the case, with the fine wood-wool. Wood-wool usually is sold in bales of approximately one hundredweight (1 cwt.) each, and one bale is sufficient to pack approximately 165 cases of Grapes.

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GRAPE PACKING FOR LOCAL TRADE AND EXPORT.

(Continued from page 15.)

For the paper and wood-wool pack it would probably be most satisfactory to fumigate in a special chamber before nailing down the boxes.

The application of this principle on a commercial scale in Australia seems desirable.

Points for Export.

On the arrival of exported Grapes, inspection has shown the chief causes of deterioration to be—

1. Insufficient or delayed cool storage in the early stages.
2. Cracked boxes having been lined with paper to prevent the loss of cork. The presence of cracks permits the carbon dioxide, a natural preservative, to escape.
3. Overtight packing, which damages the fruit at the pedicel and causes a minute oozing of juice at this part. This is responsible later for the well-known "wet" condition in Grapes.

The following recommendations, if adhered to, should reduce considerably the present annual loss:—

- (i) Second crop Grapes must not be packed.

- (ii) Harvest at correct stage of maturity—minimum 10 degrees Baumé gravity.
- (iii) Handle Grapes only by the stalks.
- (iv) Prevent "wet" by harvesting dry and trimming carefully.
- (v) Pack tightly; security of your pack lies in its snugness.
- (vi) The Grapes must cool down before packing; precool to 34 degrees to 35 degs. F.
- (vii) Use thick boards for cases—minimum thickness $\frac{3}{8}$ inch.
- (viii) Close-fitting boards (tongue and groove, cramped together for preference).
- (ix) Cases must have cleats, to permit free circulation of air between them.
- (x) Immediate cool storage after packing at 30 to 32 degs. F.

The Department of Agriculture, year after year, has displayed Grapes, in very good condition, at the Royal Agricultural Society's Show, at least six months after being severed from the vine. Grapes harvested at Shepparton during a wet autumn have been exhibited seven months later in good order. It has been proved also, that Grapes keep well packed, either with

cork filler or with sulphite wrapping paper and wood-wool, the latter being much cheaper and cleaner.

From these facts it would appear that, providing certain precautionary measures are adopted it should be possible to export Grapes successfully from Victoria to any part of the world.

Grade Standards for Grapes.

(These standards are applicable to local sale only. Export grade standards have not yet been gazetted.)

In addition to compliance with the general requirements of the Fruit Regulations, Grapes contained in a package shall be divided into either one or other of four grades, viz:—"Special," "Standard," "Special Assorted," or "Standard Assorted,"* and shall be graded and packed in accordance with the following provisions:—

(a) The package shall be marked with a true designation of the grade, whether "Special," "Standard," "Special Assorted," or "Standard Assorted,"* of the Grapes contained in the package;

(b) Each external layer of the Grapes on the top, bottom and sides of the Grapes shall be a true indica-

tion of the average grade of the Grapes throughout the package;

(c) Grapes described as "Special" shall consist of sound, clean, mature Grapes of one variety, of uniformly good color for the variety, firmly attached to the stalks, not split, crushed, wet, soft, wilted, shrivelled, or scarred; free from diseased, raisined, dried, or small berries;

(d) Grapes described as "Standard" shall consist of sound, clean, mature Grapes of one variety, of fairly good color for the variety, firmly attached to the stalks, not split, crushed, wet, soft, or wilted; free from diseased, dried, or immature berries;

(e) Grapes described as "Special Assorted" shall consist of sound, clean, mature Grapes, of not more than three varieties in any package, of uniformly good color for each variety, firmly attached to the stalks, not split, crushed, wet, soft, wilted, shrivelled, or scarred; free from diseased, raisined, dried, or small berries; and

(f) Grapes described as "Standard Assorted" shall consist of sound, clean, mature Grapes of not more than three varieties in any package, of fairly good color for each variety, firmly attached to the stalks, not split, wet, soft, or wilted; free from diseased, dried, or immature berries.

*It is possible that an alteration of these designations may be made shortly to the following corresponding terms:—"Extra Fancy," "Fancy," "Extra Fancy Assorted," and "Fancy Assorted."

GRAPES PRICES.

Same as Last Year.

At a meeting of the Federal Viticultural Council of Australia at Melbourne on January 16, it was decided to recommend to the Grape Prices Fixation Committee that the prices for Grapes at the forthcoming vintage should be the same as in 1934, and that the price of fortifying spirit, and the date of payment for Grapes, should remain unaltered.

It was decided to ask the Wine Overseas Marketing Board to discuss with the exporting section of the wine industry the question whether the minimum export prices fixed by the Board should be revised in the light of present conditions in the overseas trade.

The provision of an advanced course for students of winemaking and for the conduct of oenological research was recommended.

IMMATURE GRAPES.

Warning to Growers and Agents.

With the approach of the season for fresh Grapes, the Department of Agriculture issued a warning to growers that consignments of Grapes must be sent in packages branded with the grade standard in accordance with the provisions of the Fruit and Vegetable Packing Regulations. The Grapes must also comply with the maturity standard fixed by the regulations, that is filtered juice must show a specific gravity of less than 1.075 at 60 deg. Fahr. It is in the interests of growers as well as consumers that immature Grapes should be kept off the market and it is the intention of the Department to prosecute growers and agents who forward to market or sell to the public any Grapes which are immature or contained in packages not branded in the manner prescribed by the regulations.

VICTORIA.

Somerville, 27/1/36.

The generous rains which fell generally throughout Victoria did not reach the Mornington Peninsula. A good soaking rain is needed to fill out the Apples.

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MID-MURRAY NOTES.

Abnormally Heavy Rains Damage Apricot and Currant Crops, Other Vine Fruits Not Affected :: Need for Long Distance weather Forecasts :: Export of Oranges :: Cleaning up Brown Scale :: Enforced Spraying and Grubbing of Odd Trees Assists in Codlin Moth Control :: Value of Cover Crops :: R. M. Voullaire's Useful Book :: Tipping Sultanas to Keep Growth Within Bounds :: The Pending Privy Council Case.

(By Our Special Correspondent.)

Renmark, January 20, 1936.

NO CURRANT AND APRICOT grower on the River is likely to forget the first fortnight of the year, and when we were wished a Happy New Year we little thought that half the yearly rainfall would greet us in the first two weeks of the young year. Apricot growers and Currant growers have had a particularly trying time as the Apricots were in the midst of being harvested, and the Currants were just in a critical stage of development to get a rain.

From four to seven inches fell in the various irrigation areas in South Australia, extending from Renmark to Moorook. In many places this rain followed right upon an irrigation, and caused considerable flooding of low-lying land, while the tropical downpour scoured washaways in many sandy slopes in the Kingston and Moorook settlements.

The Currant crop in all areas is badly damaged in consequence of humid conditions accompanying the downpour, but it is difficult to assess the amount of loss.

No meteorological warning was given of this eastern visitation of abnormal conditions, and it is very rare that the force of tropical monsoon extends so far south as this area. There seems to be no other method adopted by our Weather Bureau than a short time period of forecasting weather conditions by means of reports from various centres and then translated to suit local conditions.

However, there is a great need for a long distance forecast for the man on the land.

It is a well-known fact that electrical storms in the sun (which form the sun spots) have a profound influence on our weather conditions, and we learn also that the European Medical Profession have accepted the theory that it also affects the psychology of the human race. Be this as it may, the need for a long distance outline of possible weather disturbances is long overdue.

Dr. Mawson advances the theory that if a meteorological station were erected in the Southern Arctic Regions, a more accurate idea of advance seasonal conditions would be possible, which should prove of incalculable value to the primary producer.

The heavy rains recently have not caused any damage to the later varieties of Grapes, such as Sultanas, Gordos and Doradillos, as Sultanas have just begun the sugaring process, while Gordos and Doradillos are still developing in size.

There seems to be an idea in the minds of most growers that the splitting of Currants during a rain is directly caused by the moisture on the fruit itself, but this is not the case.

The reason of fruit splitting is that during the sugaring process the fruit has reached its maximum size so that when the leaves become wet at this stage they cannot transpire any surplus moisture sent up by the roots, and the only means of getting rid of this moisture is through the fruit, which naturally splits and exudes the unwanted sap. The later varieties having not yet reached their maximum size and allow of sufficient expansion to withstand the sap pressure on badly drained and shallow soils; we find as the outcome of the recent deluge, here and there a patch

of vines which have developed "wet feet," and have partially lost their leaves, thus indicating where a high water table is developing, or has already developed.

Mr. N. H. Underwood, general secretary of the Murray Co-operative Citrus Association, has been touring the River areas and addressing meetings at all the principle citrus centres. The subject of his addresses included matters of general interest, including the outcome of the 1935 citrus export season, and the future prospect of overseas marketing.

During last year, the Murray Citrus Association exported 240,000 bushels of Oranges, and there is a feeling among growers generally that continued efforts should be made towards firmly establishing the "Riverland" brand of Oranges on the United Kingdom market. It is believed that, owing to the high quality of River Oranges, that given an assured supply, this brand of fruit should, eventually be as well known as the Californian "Sunkist" Oranges in the United Kingdom.

Growers are taking more pains to clean their trees of brown scale, a scale which leaves a "smutty" deposit on the fruit. Furthermore, the Inspectors of Fruits, etc., are carrying out a vigorous campaign in an endeavor to rid these districts of red scale, the most dangerous of all citrus scale. Up to the present time this scale has not spread to any great extent on the River, and the S.A. Department of Agriculture should be commended for their action in making this drive, stamping out this pest before it becomes epidemic.

Duchess Pear picking is becoming general (by the way, why is this Pear known as Duchess in S.A. and Bartlett and Williams in other States? Cannot some concerted action be taken to adopt a common name throughout Australia?)

Pears, up to date, are cleaner of codlin moth than for very many years, and the efforts of the Pear Growers' Association should justly lay claim to a good deal of the credit for this condition. Early in the season through their efforts, an inspector was appointed to enforce the proper spraying or grubbing of all odd trees in this area; and owing to the advice of this inspector, spraying was carried out in a more thorough manner than ever before. Pear growers have been more concerned in their attempt to define the broods of grubs, by the

adoption of lure pots and watching the flight of moths, than ever before. It was possible by this means of identifying a brood on about October 26, after which, the growers were advised to spray. All things considered, the efforts of this association have been very encouraging for further work during another year.

A new packing shed has been erected by Messrs. Wood, Son & Seary, close to the railway line and in close proximity to that recently erected by the Renmark Fruit Growers' Co-operated. Consequently there is a keen bid for business. Before launching out in this new venture, Mr. E. N. Seary, manager for Messrs. Wood, Son and Seary, was for many years the manager of the Renmark Fruit Growers' Co-op., and has a good grasp on all dried fruit matters.

From time to time, we have had outlines of the various cultural operations evolved by Mr. R. M. Voullaire, Jr., of Merbein, and how he is able to not only maintain the production of Sultanas past the age which most growers take to be their prime, but has actually improved his yield. A complete outline of his yearly operations is contained in a little handbook recently published.

The main lines upon which Mr. Voullaire works is to stimulate the activity of soil bacteria by the growing of cover crops, supplemented by heavy dressings of phosphatic manures.

The seasonal operations are all timed so as to get the maximum benefit from each operation. For instance, the breaking down of cover crops and its nitrification process, is timed so that there is no excess stimulation of vine activity at setting time, which process is likely, to cause a drop of berries.

The growth of Sultanas is kept in hand throughout the year to enable the carbohydrates to be used in the formation of fruitful buds. Cuttings are buried in deep ditches in which tares are planted, thus enabling the tares to break down the cuttings when rotting.

In a brief review of Mr. Voullaire's book and his work, it is not possible to go into full details. It is sufficient to say that Mr. Voullaire, by his example of big production, has done a great work in having his season operations published in this handy little book form. To get the best results from our land, Mr. Voullaire has hammered away for years on the need for tipping Sultanas to keep the growth to within practical pruning radius. His opinions have been strongly opposed by a section of the community, but a demonstration by way of comparison between unchecked, vigorous vines and tipped vines has proved the practicability of his method of growth control.

What is now known throughout the irrigation areas as the Voullaire method of seasonal operations is becoming more in vogue each year because of its practical results.

On January 10, Renmark was en fete to celebrate the occasion of the opening of the additions to the Renmark Hotel. Great alterations and additions have been made in the shape of an additional storey (making it now an imposing three-storey structure), with architectural beauty on modern lines and design. An additional 18 bed rooms have been built, and it now comprises the most comfortable country hotel in the State. The opening ceremony was performed by the Premier, the Hon. P. L. Butler, accompanied by the Hon. M. McIntosh and Mr. T. C. Stott, M.P. In the evening a dinner was given to celebrate the occasion, and toasts were given by Mr. W. H. Eaton, chairman of the Renmark Hotel Committee ("The King"); Mr. C. H. Katekar, chairman of Renmark Irrigation Trust, proposed the toast of "The State and Federal Parliaments;" the Hon. M. McIntosh took the toast of the "Renmark Hotel;" Mr. T. C. Stott proposed the toast, "The Dried Fruits Industry;" Mr. Alec Philpott toasted "The Architect;" Mr. W. Joyce proposed "The Visitors." Responses to various toasts were made by Hon. R. L. Butler, Mr. P. R. Clarridge, Mr. J.

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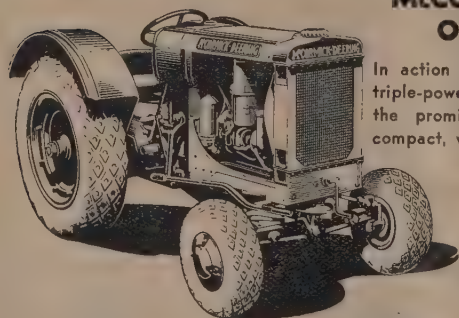
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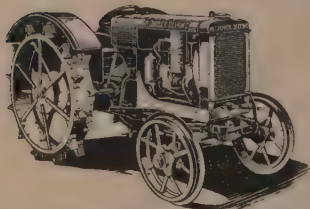


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SOUTH AUSTRALIA: Mid-Murray Notes (Continued).

Pelch and Mr. H. D. Howie. Mr. Howie, in his remarks regretted that South Australia had not allied herself with the Commonwealth in defending the appeal to the Privy Council in connection with Section 92, but was pleased to learn that the S.A. Government would provide a safeguard in case of an adverse decision.

It will be remembered that Section

92 of the Commonwealth constitution is vital to the dried fruits industry, in their marketing operations, in fact, the whole future marketing schemes proposed by various primary industries are held in abeyance pending the decision of the Privy Council, and it is of the utmost importance to get the position clarified once and for all. —"Nemo."

South Australian Fruit Marketing Association

At the December meeting of the S.A.F.M.A. Mr. H. J. Bishop presiding, there were also present Messrs. R. G. Hannaford, F. B. James, J. B. Randell, R. S. McDougall, P. R. B. Searcy, R. O. Knappstein, M. G. Basey, A. O. Petersen, M. Vickers, E. S. Mason, A. G. Strickland, R. A. Cramond, A. R. Willmore, F. Redden and the Secretary.

The secretary read the financial statement, showing £858/2/1 in hand.

Pear Litigation Case.

Regarding the request from the Batlow Packing House Co. for assistance in fighting the Pear litigation case, it was decided—

"That this association should make a contribution towards the legal expenses, provided that contributions were also being made by the other States."

Census of Fruit Trees.

A resolution was carried in favor of a census of fruit trees and vines being taken, and requesting the Government to make available the necessary funds.

Interstate Grade Standards.

Correspondence from N.S.W. Dept. of Agriculture re non-export Apples and Pears grown in South Australia and proposed grade standards for gazettal for local marketing deferred till next meeting.

Freight Allocation.

The chairman reported what was being done in connection with the Freight Committee formed by this association to deal with applications for

space for the coming season. He stated that it had been decided that applications must be supported by—1, Sale; 2, Availability of fruit for sale. All applications, with satisfactory supporting evidence, were to be submitted to Mr. E. W. Painter, Chartered Accountant (Aust.), as an independent auditor, for certification, and only applications supported by satisfactory evidence would be entertained. The auditor would also compile a list of growers, showing the total quantity of fruit they were undertaking to supply through all sources.

It was considered that a big step forward was being made in this new method, which would have the effect of completely eliminating speculative applications for freight space.

Field Day.

Mr. F. Redden, of Cudlee Creek, kindly consented to have the next field day at his property on Saturday, February 1, 1936.

Rules.

As the result of the statement recently made, that under the rules a member can not resign without permission of the Executive Committee, the secretary advised that the solicitors stated that Rule 6, in regard to resignations, was the usual rule in an incorporated association, and members could resign at the end of any financial year in accordance with the provisions of the rule, and the Executive Committee could not arbitrarily refuse to accept the resignation.

MORE RESEARCH NEEDED: GREATER ASSISTANCE DESIRED FROM SUGAR INDUSTRY.

UNDER THE AUSPICES of the South Australian Agricultural Bureau, a conference of fruit-growers on the non-irrigated areas of the State, met at Lyndoch at the close of last year. Delegates were present from Light's Pass, Greenock, McLaren Flat, Blackwood, Williamstown and Lyndoch. Mr. E. N. Evans presided.

The necessity for Australia exporting fruit of only the best quality because of increasing competition from other Southern Hemisphere countries was emphasised by Mr. W. J. Spafford, Deputy Director of Agriculture.

Mr. J. S. Hammat (Lyndoch) read a paper on "Some Observations of the Control of Codlin Moth," and Mr. B.

Boehm (Light's Pass) contributed an excellent paper on "Manuring Vines."

The following resolutions were carried:—

"That growers get into touch with their district instructors with a view to having further investigations made into die-back of Apple trees."

"That a greater sum be paid to the Fruit Industry Sugar Concession Committee in order to stabilise the fruit industry."

"That a viticultural instructor be appointed for the non-irrigated vine growing areas."

"That an experimental orchard and vineyard be established in connection with the Nuriootpa High School."

"That a geological survey of the district be made in connection with water for irrigation and prevalence of frost."

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First-class Trees available—strong, healthy, well-grown, true-to-name, free from insect pests.

APPLES, PEARS, PEACHES, PLUMS, APRICOTS,
CITRUS, SMALL FRUITS, ETC.

Packed and despatched by experts to any part of the world.

WRITE FOR CATALOGUE

C. J. GOODMAN

PICNIC POINT NURSERIES, Bairnsdale, Victoria

Health Value of Deciduous Fruits

THIS IS THE KIND OF INFORMATION
THAT NEEDS TO BE PUNCHED HOME.

When "Advertising" is spoken of — Remember — EDUCATIONAL
ADVERTISING Like This is What is meant

THE ADVERTISING OF FRUITS is one of the appreciated activities of the Committee of Direction of Fruit Marketing, Brisbane. In a circular recently issued by the C.O.D., entitled "The Health Value of Deciduous Fruits," the following exceedingly valuable information is made public.

:: :: ::

Primitive man subsisted largely on a diet of nuts, and was free from many of the present-day ills which afflict civilised man, due to the consumption of refined foods.

In nature the fruit is not of direct benefit to the plant. It is intended as a bait to attract birds and insects, and to ensure the liberation and transportation of the seed. Thus, it is beautifully colored and delightfully flavored. It is protected against the weather, and rain is prevented from washing away its soluble palatable flavors. It is literally canned by nature, which puts a perfect covering over the Apple, the Peach, the Pear, the Grape, and protects the Peach with a bloom that sheds water.

Medical research has definitely established, and the public now generally realises, that fruits have a health value far beyond that of their actual food contents, although they are rich in sugars and minerals. Discoveries of the full value of fruit have been due to recent investigation of vitamins — those accessory food factors so essential to good health which fruits possess in abundance.

If one vitamin is lacking or very deficient in food, at first vague ill-health is noticed, followed by definite disease which, according to the vitamin lacking, may take the form of scurvy, beri-beri, rickets, or pellagra. If, however, the deficiency is only slight, not marked enough to cause any of the declared diseases, the process stops at the stage of ill-health, but the ill-health is continuous. There is a loss of that sense of well-being, there is lack of energy, pallor, some bowel or digestive upset, a tendency to catarrh, or a susceptibility to all disease germs. Sickness, if it be taken is often long drawn out, the subject not having the bodily power of resistance as would be the case if the diet had been correct.

Five groups of vitamins have been discovered, four of which (A, B, C and D) are present in fruits.

Vitamin A is necessary for keeping the tissues healthy and for combating the attacks of germs. Its lack causes diseases of the eye.

Vitamin B is concerned with the growth and the health of the nervous system. Its total absence causes beri-beri. Its deficiency results in constipation and bowel disorders, deficient growth, early ageing, easy fatigue and poor general condition.

Vitamin C is necessary for the health of the tissues. Its deficiency causes loosening of the teeth, scurvy and susceptibility of germ infection.

Vitamin D is essential for the proper growth and the development of bones and teeth.

Deciduous fruits are produced under ideal conditions and mature in the summer months. They are thus particularly rich in vitamins.

An important effect of eating fruit is the introduction of an acid substance into the digestive tract which later yields an alkaline of basic substance in the blood and tissues. Fruit

acids are organic and have a definitely alkaline reaction on the blood, counteracting the acid forming foods, such as meat, fish and eggs.

The value of fruits, particularly Apples,

for teeth preservation

is as yet little known by the public. The reasons for tooth decay and the protective measures necessary for the preservation of the teeth are interesting. Nature has capped every

tooth with one of the hardest substances known, called enamel. It is formed by living cells beneath the gums, but once destroyed can never be replaced. Nature has, therefore, made it very hard and resistant, capable of crushing and grinding and lasting. It has one weakness; being formed of lime salts it is dissolved

slowly but surely by acids. To guard if from this danger Nature keeps it constantly bathed by an alkaline fluid, the saliva.

So cunningly has Nature contrived the mechanism of the salivary glands, that they are stimulated to action by all pleasant acid flavors, such as those of fruit juices, which flood the mouth

with alkaline saliva. But tasteless, insipid and alkaline foods do not stimulate the salivary glands, but discourage them. Nature's safeguards were almost perfect until mankind commenced to feed on large quantities of starchy foods and sugar, against which her defensive mechanism was insufficient.

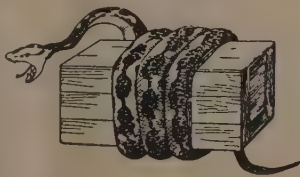


An auction sale in progress at the Producers Markets Ltd., Perth, W.A.



View showing Producers Markets Ltd., Perth, W.A.

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Latest Electric Machine Mounted as a Complete Mobile Unit

EFFICIENCY

The machine is automatic, giving a uniformity of tension with every wire straight around the case: thus each wire carries an equal proportion of the load. No loose wires irrespective of the operators.

SPEED

Ties from 400 to 600 wires per hour.

ECONOMY

The low cost of wire. The small off-cut or waste of wire, which is 1 1/2 inches and which cannot be varied however loosely the wire is placed round the case.

The complete unit will be leased at a low annual rental which embodies service and maintenance, with no tags as to the purchase of wire.

Further particulars on application to:

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21 HOWARD ST.,

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Phone: F 2708. NORTH MELBOURNE.

Phone: MA 4392.

CHIPPENDALE, SYDNEY

South Australian Agents: **GOLLIN & CO. PTY. LTD.**, 110 North Terrace, Adelaide.

HEALTH VALUE OF DECIDUOUS FRUITS.

(Continued from page 19.)

These destroy the enamel by forming a paste lodging in the small cavities of the teeth, and the spaces between the teeth, or a glutinous deposit on the teeth. These pastes and sticky substances cannot be penetrated by the saliva, and slowly ferment as they adhere, forming acids. Each atom of acid, as it is formed, unites with an atom of lime from the enamel. As this goes on day after day, month after month, year after year, the enamel becomes penetrated at its weakest spots. Once it is penetrated, the interior of the tooth begins to decay, the living pulp becomes inflamed, and the tooth is lost. In the early stages, the dentist can save the tooth by a skilful treatment. In the later stages the tooth should be extracted; as retained it is a source of weakness and poison."

When an Apple or a Pear is eaten the flow of saliva is increased and the teeth are cleansed.

Fruit should be eaten after every meal to remove all food particles from the teeth. Apples, if eaten last thing at night, act as Nature's tooth brushes.

TASMANIA

Seasonable Orchard Notes.

Pest and Disease Control.

(By P. H. Thomas, Chief Horticulturist, Tas. Dept. of Agriculture.)

A SUMMARY of information received by the Chief Horticulturist from the district orchard inspectors, together with other information relevant to fruit culture follows:—

Weather and Disease.

Since the last report weather conditions have been very changeable; during the first three weeks of December showery, warm weather predominated in the main fruit-growing areas, and several heavy rains were experienced. Whilst this ensured rapid fruit development in both Apples and Pears, black spot and other fungal troubles spread at an alarming rate in some orchards, and the quantity of exportable fruit was seriously reduced. A complete change to dry, sunny weather has,

however, done much to check the spread of black spot, and the general outlook has improved since then.

The lime sulphur-colloidal combination spray appears to have exercised a good control, and should be resorted to where late spot infection is feared.

Codlin moth is again fairly prevalent this summer, and growers are advised to pay close attention to their arsenate of lead applications—1 lb. of powder to 25 or 30 gallons of water, with the addition of a proprietary spreader at the strength recommended by the manufacturer, should give a good control.

The light brown Apple moth is also numerous, and though the arsenate spray referred to, if applied thoroughly, will in a measure prevent later fruit injury, in infested areas

the removal and destruction of all young shoot tips during this month is recommended as an additional protection, and will destroy a large number of grubs. This measure will also lessen the cover for later grubs, and force them on to leaves already coated with an arsenate deposit.

Red spider has not been particularly noticeable up to the present time, the lime sulphur-colloidal combination spray apparently having a beneficial effect in this direction also.

The "canary fly" is another pest which shows a reduction in quantity as compared with this time last year, the nicotine application in early November exercising a good control. Nevertheless, where infestations were severe, an additional nicotine cover spray should be applied towards the end of this month. The object of this spray is to catch the second brood, which is now hatching, and may be found in numbers on the under side of the leaves. Apply nicotine, therefore (1 pint to 80 gallons), in combination with the next arsenate of lead, directing the spray so that both sides of the leaves receive a covering.

Stone Fruits.

The harvesting of early Plums has been almost completed, and Apricots are ready for the first picking over in many districts. The quality of this fruit promises to be good, but owing to a heavy drop the quantity will be less than anticipated.

Berry Fruits.

In the earlier districts the harvesting of Strawberries, Raspberries and Gooseberries has been completed and Black Currant picking is well under way. In the more elevated berry fruit plantations, crops are still maturing and will likely continue until the end of February. Some loss has been incurred by growers through the lack of pickers and rapid ripening of fruit. Fortunately, dry weather has prevented excessive waste through fungal agencies. On the whole the crop is good and the quality above average, this combined with a good demand should help the industry considerably.

??? ??? ???
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 can be dispelled by consigning it to

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 LONDON, W.C.2.**

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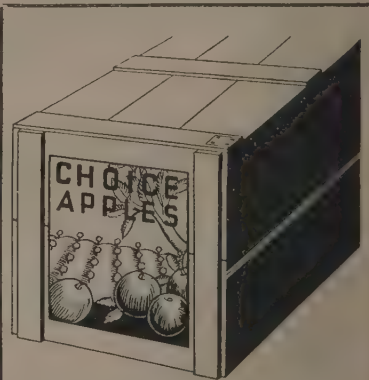
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London, E.1.

Tasmanian Growers ship through Eric E. Burgess, 88 Collins Street, Hobart.

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Demands
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DAVIS 333
ADHESIVE

THE BEST
COLD WATER PASTE
IN THE WORLD

Obtainable from all Hardware,
 Paint and other Stores.

Picking Fruit for Export and Cool Storage

APPLES — PEARS — PLUMS

GOOD FLAVOR NEEDED AS WELL AS GOOD APPEARANCE. SUCCESS ONLY POSSIBLE WHEN FRUIT PICKED AT CORRECT TIME.

IMPORTANCE OF CAREFUL HANDLING. STORAGE TEMPERATURES DEFINED.

(A Broadcast Talk by Frank M. Read, M.Agr.Sc., Chief Inspector of Horticulture, Victorian Dept. of Agriculture, over Station 3AR.)

IT WILL BE GENERALLY ADMITTED, I think, that in their methods of preparing fruit for export, Victorian growers in the main have made great strides in recent years. When one takes into consideration certain disadvantages under which the work is performed, the con-

clusion may be drawn reasonably that this phase of the fruit industry is well up to the average of Victorian primary production in general.

Nevertheless, those most intimately acquainted with the various aspects of fruit export are well aware of its shortcomings and the directions in which great improvement is yet possible. Let us first examine the position along general lines. There are several requisites for successful export and storage of fruit.

Firstly we must be able to produce fruit attractive in appearance and of good flavor. This we certainly can do, and considering the Victorian climate, which, with all its vagaries is still at least as favorable as those of our competitors, we can take to ourselves only part of the credit. Where growers fail to produce good quality fruit and endeavor to export unsatisfactory lots it is usually a gross reflection on their efficiency, and for this reason scant sympathy is wasted by the industry on growers whose fruit is rejected by export inspectors. This is as it should be.

The second necessity is that as a community we should have the technical knowledge necessary for the successful export of such a perishable product; and further, that every grower should be quite clear on the main essentials at least. This means that part of the responsibility is upon scientific investigators and qualified organisations to investigate and thoroughly understand the fundamental nature of fruit storage and to make their results available in an understandable form, and part is on the growers particularly and the industry in general to be receptive of

new ideas and to take the trouble to find out the importance of new knowledge as applied to their own particular cases.

Having been closely associated both with the industry and with research work in Victoria on problems of fruit export and storage, I feel that research workers have a soundly based knowledge of the behaviour of our established export fruit; and an appreciation of the conditions under which they may best be cool stored or exported. This is not intended to indicate that the investigators of these problems have reached finality and that further advances cannot be made; but the opinion is offered very definitely that in the chain of fruit export as it exists to-day the investigational side is by no means the weakest link.

It is gratifying to see the extent to which the results of recent research work have been applied successfully in practice; but we are still far from that happy state in which every grower would have a clear conception of the requirements on the technical side. Let us briefly refer to them presuming that the requirements as to variety, type of case, necessary marking, etc., are appreciated.

Good Flavor Essential.

We must realise in Victoria that our customers either at home or abroad will not be fully satisfied with fruit which merely looks good. It must have good flavor as well. Now flavor and aroma in fruit are developed fully only at one stage known as the fruit's climacteric. Theoretically, all fruit should be placed in the hands of the consumer at this stage, and much of the success for instance of the powerful Banana distributing organisations throughout the world is due to the fact that on the whole they do approximate to this requirement.

Jonathan Apples

taken as an example may reach this climacteric stage on the tree if left until the ground color is thoroughly yellow and at picking time will be delicious; but at no subsequent time if stored will they possess the same delicious flavor. They may look perfect, however, for an appreciable time after full flavor has disappeared, never to return. If picked from the tree when the ground color is just turning

from green to yellow and cool stored promptly, their ability to develop full flavor when removed from store will be retained for many weeks, for the climacteric, which would be reached in a few days longer on

the tree would be delayed for a considerable time by suitable low storage temperatures. The process of ripening in both cases would be essentially the same, but would be very much slower in the latter case. Even under optimum conditions therefore, Jonathans in cool storage in Victoria, are definitely past their prime in September.

If Jonathan Apples are picked before the first tinge of yellow appears in the ground color they tend to shrivel in cool store and fail to develop normally.

Thus the most important requirement is that fruit should be picked at the correct stage of maturity. If picked either before or after this stage the results must be disappointing.

Picking maturity

for storage or export should not be confused with eating maturity, which is reached at the time of the climacteric as stated previously. Having harvested the fruit at the correct stage it should be moved rapidly and carefully to a cool temperature. Any delay in doing so may cause irreparable damage to the shorter lived fruit such as certain Pears and Plums by hastening their ripening and reducing their effective storage life.

Although Apples, after the best eating maturity stage is past, may continue to look attractive,

Pears and Plums

which have been over-stored will deteriorate in appearance in a few days after removal to ordinary temperatures, even though they look sound in store. Pears show mealiness of flesh, scald of the skin and core breakdown; while Plums develop mealiness and a browning of the flesh.

It must be our aim to land these fruits in England so that they have sufficient storage life still in them to enable them to be ripened with good flavor and appearance. It is far from sufficient that they should complete their journey at a low temperature and come out of the ship's hold apparently sound.

Apples: Red Apples should be picked when the ground color is just changing from green to yellowish. No notice should be taken of the red color at all. With the introduction of color grading there may be a tendency for growers to leave red Apples too long on the tree in order to develop higher color, and so qualify for the extra fancy grade. This would be a most unfortunate development, for to maintain good eating quality they should be picked at the maturity previously described. If the Apples have developed sufficient red color by the time the ground color is yellowish green, they are truly extra fancy, but otherwise they should be picked at the correct maturity and sent as fancy grade. Green Apples should be picked when the dark green is just

changing to lighter green, but before any yellow appears. The fruit should be kept as cool as possible after picking and cool stored at 32 to 34 deg. F.

Pears: Pears should be picked when still hard and dark green as soon as they are up to size. The first trace of yellow is the danger signal that optimum picking maturity has been passed. Immediately pre-cooling should be given after picking, preferably before packing. Pears should be stored at 30 to 32 deg. F.

Plums: Colored Plums should be picked not later than when the first signs of coloring are evident. Yellow Plums should be picked when still fairly green. All Plums should be up to size for the variety, otherwise they will not develop normally beyond the hard inedible picking stage. They should be promptly pre-cooled as in the case of Pears and stored at 31 deg. F. Particular care should be taken that ventilation is efficient in the storage chamber, for Plums appear very susceptible to carbon dioxide at this temperature.

Care in Handling: With all fruits the greatest care should be taken throughout, for bruises not only accelerate the onset of ripening and thus reduce the storage life, but also render the fruit more liable to fungal infection.

We have said that successful export depends on firstly production of quality fruit and secondly the requisite knowledge and care in the technical aspect of fruit picking, transport and storage.

District Picking Dates.

We have now come to the third and possibly the most important point. The present organisation of the fruit industry leaves much to be desired. It has been said that fruit should be picked and exported at clearly defined times; but to a considerable extent lack of suitable organisation prevents this being done. While growers in every district dispose of their export fruit through a large number of independent channels; where arrangements of necessity are made by each for shipping space well ahead of the harvesting season irrespective of seasonal influences which decide the date of maturity of the crop; and where penalties are incurred for failure to fill shipping space it must follow that at the critical stage such considerations often outweigh the technical aspects we have previously discussed.

Until the industry is in a position to view Victoria and perhaps Australia as a whole and to organise export on that basis, it will fail to achieve its objective completely. Fortunately there are men in the industry capable of effecting this organisation given adequate support. It is urgent that every grower should realise the necessity for affording this support of organised marketing.

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PERTH — ADELAIDE HOBART



Cold Storage of Grapefruit in U.S.A.

(With Comments by Willis J. Williams, B.Sc., Superintendent of Markets, Sydney.)

FOR SOME TIME the United States Department of Agriculture has been conducting experiments and investigations as to the best temperature to use in the export of Grapefruit to foreign countries. The studies carried on have demonstrated that the use of 50 to 55 degs. Fah. for Californian Grapefruit has proved to be far more satisfactory than the lower temperature of around 40 degs. Fah. previously employed.

Probably the most serious factor affecting the sales value of Grapefruit in foreign countries is the development of a rind blemish or disease variously known as "pox" or "pitting." It is a non-parasitic trouble which is apparently very responsive to temperature conditions, developing very seriously after holding the fruit at comparatively low temperatures, while that held at temperatures above 50 deg. Fah. generally remains free from the trouble.

This disease does not affect the eating quality of the fruit, but does

very markedly affect its appearance and its erratic occurrence and the frequent serious development of the trouble after discharge of cargoes in foreign markets has resulted in heavy discounts in the prices received.

At a temperature of 50 to 55 deg. Fah., of course, fungus rots develop much more rapidly than they do at lower temperatures, but the trade appears to prefer to have fruit free from "pitting" even at the expense of a small percentage of decay than to avoid decay altogether by use of low temperatures and have so much pitting.

With Californian Grapefruit, in which parasitic decays are not experienced, or at least which are not seriously affected with these rots, the use of the higher temperature during transit overseas appears to be quite successful and probably is to be recommended except with very weak fruit at the end of the season, which should not be exported anyway.

The report of some experiments

carried out by the U.S. Department of Agriculture is most interesting. The result of these experiments proved that definite temperatures and humidities can be set down for the cold storage of any particular fruit in different parts of the world.

Some time ago it was proved that certain varieties of Apples with which I had experimented in Sydney, would keep best at certain temperatures. The same variety of Apples keep at their best in higher degrees in New Zealand.

The results of the experiments in America have proved that temperatures as high as 50 to 55 deg. Fah. for Grapefruit are much better than the lower temperatures round about 40 deg. Fah. that was previously used.

In the experiments that I have conducted in Sydney, after the fruit had been placed in the pre-cooler at a temperature of 50 degs. Fah. for a couple of days and then placed in a cold storage room at 35 degs. and 40 degs., it was found that spotting was noticeable at the higher temperature, while the American experiments seemed to indicate quite the opposite.

Grapefruit in Sydney kept particularly well at a temperature of 35 deg. Fah. with a humidity of 80 per cent. for a period of four (4) months. At the end of this time there was a certain development both in color and skin, the ripeness of the fruit and the flavor seemed to improve.

Before the fruit was taken out of store for market purposes it was placed in the postcooler for two days at a temperature of 50 degs. Fah. In later experiments some were placed in the postcooler at 65 degrees, and this seems to be a better temperature. Under these conditions it was also found that Grapefruit kept in good order and condition after being taken out of cold storage.

M.I.A. COOL STORES.

Apricots Stored Three Weeks Prior to Canning.

The cool stores at Griffith and Leeton were freely used during the Apricot season, and are now in use for Pears and other fruits. The Griffith store has a capacity of 10,000 cases and the cool store at the Leeton cannery will hold 30,000 cases.

By using these cool stores it was possible to spread deliveries of Apricots. The Leeton and Sydney canneries were given regulated supplies,

"CHOICE" JONATHANS IN JANUARY.

No Good to the Industry.

Prominently displayed in some Melbourne fruit shops on January 19 were "CHOICE JONATHANS" (so marked), at 6d. per lb.

When purchased, these Jonathans were surprisingly firm considering their long cold storage, but "choice" they were not, and the industry does not benefit by this procedure.

We know of people buying these Jonathans, believing they were "new seasons." Pity their ignorance if you will, but in many matters the general public is "an ass."

There are many problems confronting the fruit industry. One sure way to lose public confidence is to sell articles not up to standard.

Success to the industry will come with supplying the public with the right quality goods at the right time.

it being found possible to store the Apricots up to three weeks. Even after this period of storage and railing the fruit 400 miles to Sydney it opened up splendidly.

New Registrations.

Orange Fruit Packing Co., The, 2 McNamara-street, Orange, N.S.W., fruit grading and packing. Commenced 14/10/35. Proprietor: Andrew N. H. Kerr. Registered 24/10/35.

Fruit and Vegetable Traders Ltd. Registered 7/11/35. Capital £10,000 in £1 shares. Objects: To carry on the business of importers, exporters and dealers in fruit and vegetables, etc. Subscribers: Leslie J. Jenkins, Edwin Cooke, Percy S. Macdermott, Clendon R. Walker, Arthur M. Weymark, Walter M. Musgrove and Clendon C. Greentree (1 share each). Registered office, Sydney.

Sang & Co., 133 George-street, West, Sydney, fruit and vegetables. Commenced 19/8/35. Proprietor: Claud B. Carrodus. Registered 28/10/35.

Perfection Fruit Wiper Pty. Ltd., Croydon Cool Stores, Croydon. Capital, £1,000 in £1 shares. Names in Memorandum: Egbert George Phillips (director), 1 share; Alfred Cave (director), 1 share.

Border Bananas (1937) Limited.—Reg. 16/1/36. Cap.: £75,000 in £1 shares. Objects: To acquire Banana plantations and carry on the business of Banana growers, etc. Subscribers: Henry G. Bennett, Christopher Desmond, Margaret J. Newton, Dorothy J. Cozens, Lorna Siddens, Helen Hancock and Albert C. Palfreyman (1 share each). Reg. office: Sydney.

The teacher was explaining the difference between the stately Rose and the modest Violet.

"A beautiful, well-dressed woman walks along the street, but she is proud, and does not greet anybody—that is the Rose. Behind her comes a small creature with bowed head."

"Yes, miss, I know," Tommy interrupted, "that's her husband."

WOOD WOOL

Finest Grade for Export Fruit.

STRAWBERRY BOXES.

and Fruit Containers.

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AUSTRALIAN BERRY BASKETS CO.

175 Kent Street, Richmond, Vic.

Tel. J1263.



CENTENARY APPLE WIPING MACHINE

Has stood the test.

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No Brushware.

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Replacements Practically Nil.

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Definitely Does Not Bruise the Fruit.

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Full particulars from—
E. G. Phillips
COOL STORE,
Croydon, Vic.

LION BRAND.



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Write for Prices and Particulars to:

ORCHARD SPRAYS PTY. LTD., 549-51 Church Street, Richmond, Victoria, or—
CAMERON, SUTHERLAND & SEWARD PTY. LTD., Riverside Avenue, Sth. Melb., Vic.
SILBERT SHARP & BISHOP LTD., Rundle Street, Adelaide, South Australia

Orchard Sprays

We manufacture a complete range of sprays for the orchardist, including:

ARSENATE OF LEAD (PASTE)
ARSENATE OF LEAD (POWDER)
LIME SULPHUR
WHITE OIL EMULSION
PREPARED RED OIL
BORDEAUX MIXTURE
BORDEAUX COMPOUND
SPREADERS (SPECIAL)

CASEINATE
SPREADER (ORDINARY)
CALCIUM CASEINATE, ETC., ETC.

Victoria Mark Fruit Co. Ltd.

Standardised Fruit Sold at a Premium

Large Quantities of Apples Sold for Drinks and for Processing.

THE first ordinary general meeting of shareholders in Victoria Mark Fruit Co. Ltd. was held at the C.T.A., Melbourne, on December 30, 1935, Mr. W. A. Thiele presiding.

The secretary (Mr. Geo. H. Anderson) read the notice convening the meeting. The minutes of the previous meeting and the annual report and accounts were taken as read.

The chairman stated that the Victoria Mark Fruit Co. Ltd. was formed to arrange the orderly marketing of Apples locally. It was felt that while all classes of fruit had a value, the haphazard marketing methods existing in the local sales of fruit did not tend to secure for the grower the returns necessary to make Apple production a reliable and profitable business. Standardisation in other countries of the world being considered the secret of successful marketing, it was decided to market in Victoria a

standardised pack of Apples under a printed wrap and label, and to place in channels of manufacture such fruit as was suitable for processing.

With this object in view, the standards adopted for sale under the "Mark" label were those of export "Fancy" and "Extra Fancy." Standard for processing comprised fruit free from moth and rot but subject to black spot and excessive russet.

Quantities under all standards were placed with buyers, and repeat business was obtained, but the principal difficulty experienced by the company was that of continuity of supply. Owing to an exceedingly adverse growing season, shareholders could not produce the required standardised fruit, and from 263 shareholders 27 only supplied fruit to the requirements of the Fancy and Extra Fancy grades.

Under such circumstances the board was seriously considering the reduction of these standards or the introduction of such additional lower standards as may be required by the market.

However, such fruit as was marketed realised prices well in advance of the market, and such sales prove that there is a definite buying public for a standardised article of quality. It must be remembered also that this result was obtained without an expensive sustained advertising campaign.

Referring to the "process" fruit placed with manufacturers, the chairman said that it was in this direction that the year's effort had been justified. An outlet for Apple juice has been created per medium of the "Mark" by the inauguration of Cave's Pure Fruit Drinks Pty. Ltd., and 10,000 cases of perfectly sound, though externally blemished Apples, had been disposed of through this channel. "Solid Pack" canned Apple has also found a favorable market, and the directors were pleased to report that they had received from this quarter an inquiry for

1,000 cases of Apples per week for processing for the whole of the coming season, and, in addition, other inquiries were to hand for season 1936.

The adverse season had not allowed the production of income which would justify the originally contemplated publicity campaign. The Minister of

Agriculture was approached for assistance for sales publicity for the Apple industry generally, but he was unable to help. The Minister's suggestion of approaching the Rural Credits Branch of the Commonwealth Bank was considered, and a pooling scheme drafted. This went before the Bank Board in Sydney, and was rejected on account of the perishable nature of the security, but the general scheme was commended for its merits.

However, inexpensive methods were possible, continued Mr. Thiele. The "Golden Apple Appeal" of the Ballarat Fete Committee was highly successful in making contact with the public. The newspapers were used as much as possible for reports and articles, and in this respect the board tendered thanks to the press. At the Royal Melbourne Show prizes were donated for essays and fruit. Labels and wraps were supplied to the Department of Agriculture for use in packing class displays, and the Royal Agricultural Society made available to the "Mark" a large space in the Centenary Hall, where a creditable display was arranged. The pitiful part of it all was that the fruit, so freely advertised and so favorably commented upon, was not available to the public through the general fruit selling channels.

The Victoria Mark Co. was represented at the conference of the Australian Apple and Pear Council at Hobart in November, and it was pleasing

Young Orchardists Club at Harcourt

AT a well-attended meeting held on November 9, the Harcourt Young Orchardists' Club was successfully launched. Its objects were stated to be the general advancement of the fruit industry and consideration of the various problems to be met with in fruit culture. Any person engaged in the production of fruit, either for himself, his parents or an employer is eligible for membership and a fee of 5/- per year was agreed upon.

The first officers elected were: President, Mr. W. Eagle, Jnr.; Secretary, Mr. F. Bertuch; Treasurer, Mr. T. C. Warren. The addition of two other members, with the above, gave a working committee of five.

A programme of activities will be put in hand and will provide for monthly seasonal reports on spraying,

cultivation, harvesting, re-working and all phases of fruit culture. Shows and competitions will be arranged and, all told, the new club should be of great benefit to the district.

A junior club in connection with State Schools in the district will also be formed at an early date.

Since the commencement of the Harcourt Young Orchardists' Club, much useful work has been accomplished. Contact has been made with Research Stations in England and U.S.A.; matters of local and general interest are being studied. The importance of increased research activity into fruit problems is felt to be pressing, and the club is making efforts to have more cultural research work attended to locally.

that the Council was considering the local marketing question. Through the council, the several States have been commissioned to create representative committees to consider the matter still further, and this has resulted in the Victorian Fruit Marketing Association convening a meeting for the purpose.

"As chairman of the board," concluded Mr. Thiele, "I desire to tender my thanks to my fellow directors for their whole-hearted support and unflinching interest during a very adverse year."

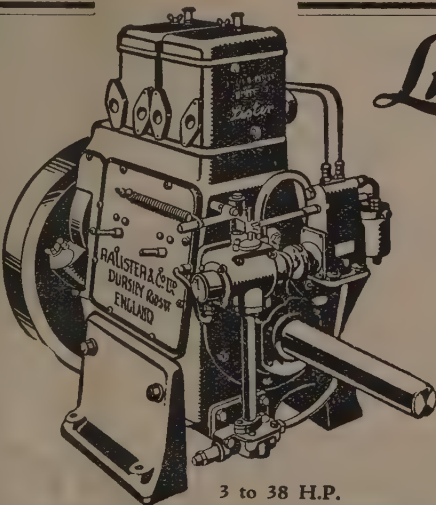
The retiring directors, Messrs. J. R. Vail and E. W. Thompson, were re-elected, and Mr. S. Brown, Pakenham, and Mr. R. Woodward, Red Hill, were elected to fill the vacancies created by the retirement of Messrs.

Karnaghan and Jarman. Mr. Henderson congratulated the directors and the manager on the satisfactory results obtained in a very adverse year.

As a recommendation to the board, Messrs. Parnham and Grant moved that a call of one pound (£1) per share be made.

Votes of thanks were moved to Messrs. Karnaghan and Jarman, the C.T.A. and the Press, after which the meeting closed.

Memo— An error occurred in the publishing of the names of the directors last month. Messrs. Jarman and Karnaghan did not seek re-election, and their places were taken by Messrs. R. Woodward and S. Brown.



Lister Crude Oil Engines FOR DUSTY CONDITIONS

Listers are eminently suitable for dusty conditions, as engine is totally enclosed, bearings are dust-proof and automatically oiled. Run day and night without attention. Start easier than a petrol engine, even below freezing point. Thousands of the reliable British Listers are giving

THE WORLD'S CHEAPEST POWER

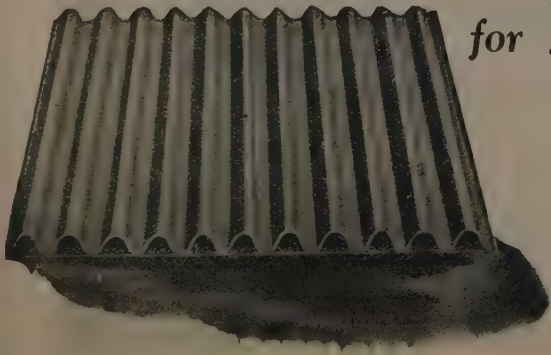
for mines, operating cranes, winches, private cool stores, electric lighting, battery charging, factories, farms, dairies, etc. Fuel cost per hour: 3-h.p., 1½d.; 5-h.p., 2½d.; 7-h.p., 2½d.; and up to 38-h.p. as marvellously low. Mr. J. Robinson, High Street, Scoresby, stores over 6,000 cases of fruit for £25 per year for crude and lubricating oil—a cost of one penny per case, and the engine never gave the least trouble. Compare with your cost.

EASY TERMS. WRITE. Please mention this advt.

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In the following Sizes and Quantities:—

DUMP CASES—			
SIDES (Plain or Vented)	17 x 13	500's	
TOPS AND BOTTOMS	17 x 8	1,000's	
CANADIAN CASES—			
SIDES	17 x 10	1,000's	
TOPS AND BOTTOMS	17 x 11	1,000's	
PEARS—			
SIDES	13 x 6	1,000's	
TOPS AND BOTTOMS	13 x 12	500's	

Also Combination Packs of:—

DUMPS	CANADIAN	PEARS
(500 17 x 13)	(500 17 x 10)	(334 13 x 6)
(500 17 x 8)	(500 17 x 11)	(334 13 x 12)

Anti-Bruze Corrugated Fruit Pads
MADE IN TASMANIA.

Rootstocks for Plums.

Research Work in England of Interest to Australia and N.Z.

OF INTEREST to fruit growers and nurserymen are the tests which are being made at the E. Malling (England) Research Station.

At the recent Imperial Fruit Show there was an exhibit staged from this Research Station demonstrating the developments to date as regards root stocks for Plums.

In the nursery trials, stocks raised by layering from individual seedlings of Myrobalan Plum have shown big differences in regard to the percentage of "bud-take," which in the case of Czar Plum budded on to Myrobalan stocks, A, B, C, D and E, gave 85, 90, 82, 52 and 50 per cent. bud-take, respectively.

These differences in bud-take are due to the fact that some of the individual Myrobalans show incompatibility between stock and scion, while

others do not. This incompatibility may take different forms, i.e., the buds may never grow out; they may grow a few inches and then die; they may make vigorous maidens and then break off at the union, or they may actually make trees which, however, become progressively weaker and finally die.

Nurserymen, in order to avoid the risks outlined above, are advised to use "clonal" stocks that are known to be compatible with most varieties of Plums—a "clone" includes all the plants raised from a single individual.

Some varieties of Plum, such as Czar, make bad nursery trees when budded on certain rootstocks, such as the Common Plum; but the same variety—Czar—will make quite good trees when budded on certain other stocks, as, for instance, Myrobalan B. Other varieties, for example, Vic-

toria, make good trees when budded either on Common Plum or on Myrobalan B.

The fruit grower will be interested to learn that the latter stock has given vigorous trees which, although slow to crop, have given the biggest yields per tree over a 14-year period. Pershore and Common Mussel have given smaller trees, but earlier crops. Pershore is hard to propagate, and when obtained from orchards its suckers are often mixed with other stocks, whereas the Common Mussel shows a distinct tendency to throw suckers. Common Plum has proved incompatible with Czar, Pond's Seedling and President; with Victoria and Belle de Louvain it has given small but healthy trees that crop early. Brussel has proved incompatible with several varieties, throws many suckers, and has given consistently poor crops.

:: :: :: ::

Plum trees on the less vigorous stocks can often be planted 14 to 15 feet square, giving 222 or 193 trees to the acre, as compared with 134 trees to the acre on the more vigorous—Myrobalan B—stock planted at 18 feet square.

In the experiments with Plums on their own roots, some varieties have made quite as big trees as when budded on Myrobalan B, while others have made smaller trees comparable to those on Common Mussel, while nearly all varieties have cropped as well as those on the latter stock. Victoria, Pershore and Warwickshire Drooper, up to their ninth year, have cropped better on their own roots than on Common Mussel.

In their recommendations for Plum stock selection the East Malling authorities advise the use of Myrobalan B for large trees and for naturally quick-cropping varieties, whereas for smaller trees and slow cropping Plums Pershore, Common Mussel, Common Plum and Mariana deserve trial.

Experiments carried out to ascertain the relationship between Plum rootstocks and Silver-leaf disease have failed to produce a stock that imparts immunity, but recovery from attacks is much more evident among trees grown on the Common Plum stock than on the Myrobalan.

The rootstock also appears to have no significant effect on resistance or susceptibility to bacterial canker, but some varieties of Plum show marked resistance to this disease, and experiments are being conducted in the use of these as "intermediates" in double-grafted trees. Incidentally, it has been found that Plum bacterial canker organism infects the leaves in spring and summer, and the stems in autumn, and the control measures recommended are: for foliage, spraying in spring and summer, Bordeaux mixture, 4-4-50; for stem spraying at the end of September and again at the end of October, Bordeaux mixture, 5-5-50.

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In regard to the foregoing, Mr. George W. Peart (Goodman's Nurseries, Bairnsdale, Vic., writes:—

Whilst at East Malling, I inspected the trial plots of Plum stocks, and there was a very marked difference in those Czar trees which I particularly noted at the time.

The following clipping from an American paper was sent in by a reader:—

IT PAYS TO ADVERTISE.

Does it pay to advertise
Our Jonathans and Northern Spies?
Can we hope to multiply
Their use for sauce, dessert and pie?

'Tis said that Orange, Peach and Raisin
Are used because of costly praisin',
So why can't we increase our sales
By publishing appropriate tales
Of how our Apples cure what ails?

Tobacco ads tell us how handy
We'll find a fag in place of candy,
Gum merchants coyly raise the question
Why not chew gum for indigestion?

And yet, we know a juicy Apple
Can nullify the rheum from scrapple
And Apple baked and served with cream
May save us from some horrid dream.

A crisp and tasty Apple salad
Can prove our claims for health are valid,
And Apple pies baked in deep dishes,
Can satisfy our whimsy wishes.

An Apple munched in conference,
May aid the cause of temperance,
And save the ladies from offences
Of reeking smoke and pepped up senses.

Then all you men who Apples raise,
Don't hesitate to sing their praise,
I'm sure that advertising pays,
So pen your slogans trite and true,
And tell the world—It's up to you!

BARNEY SPRINGER

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All Business Under
Personal Supervision
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Every Attention
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APPLES AND PEARS A SPECIALITY

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CANNING AND JAM FRUITS

NOW, CANNED MUSH-ROOMS.

An All-the-year Industry.

SO WELL RECEIVED has been the production of canned mushrooms in U.S.A. that the pioneer in this field, Bonny Slope Cannery, of Portland, Oregon, has had to increase its culture expansion programme by 50 per cent. for the coming season.

The idea of canning mushrooms arose when the full crop of fresh mushrooms were not absorbed by the local market and a means of preserving or canning them was sought.

The treatment is interesting, and a continuous year-round industry has come into being. The first operation is made when the mushrooms are sliced. The sliced stems and buttons are then washed in tanks and drained before being sent into the blancher to be shrunk in steam. After the steam bath, the stems and buttons receive a brine treatment. The 'rooms are then canned in 2, 4 and 8 oz. tins, sealed and cooked in a retort for 20 minutes at a heat of 240 degrees F.

After the cans are cooled by water, they stand overnight before being labelled and cased ready for shipment. It is claimed that the temperature used in cooking will destroy any bacteria that may be present and that the contents will keep indefinitely.

The production of the mushrooms is done in 96 shelf beds 32 x 7 ft. in tiers of eight, in temperature controlled by insulated walls and a heating plant that maintains a heat of 60 degrees F.

The beds consist of horse manure carefully treated and mulched for a month before being spread on the beds, and spawn renewed about every four months.

Kyabram. — During mid-January, deliveries of Pears for processing commenced at the Kyabram Cannery. The district has heavy crops of clean, well-grown Pears and Peaches; record deliveries are anticipated.

THE LABEL SELLS THE CAN.

Pictorial Aids to Increased Sales.

Canneries in California are introducing labels on their canned fruit which are expected to create a favorable impression when seen on the shelves or in the windows of the grocery store.

The new labels are designed to represent a serving of the fruit in a dish ready to eat. They certainly appeal to the eye and should sell the goods. In addition to the brand of the particular cannery, there is shown a spray of the original fruit and the corresponding leaf.

Fruit as the consumer sees it—in the dish, ready to serve—is the objective of the newly adopted labels. It is thought to be an improvement on anything yet used. The brand or trade name is not superseded, but the pictorial set-up certainly invites a more personal intimacy with the contents. With a great majority of housewives, so a retail seller claims, the label sells the goods, and even well-known and long established brands need an occasional jazzing up by the label.

100 TONS OF APRICOT PULP.

Leeton, 26/1/36.

As an experiment, the Leeton Cannery put up 100 tons of Apricot pulp and sold the lot in London. Mr. G. Enticknap, President of the Leeton Fruitgrowers' Association, told a big meeting of growers that this enterprise was undertaken in a search for new markets. Previously, Australian Apricot pulp was unknown in London. It was now hoped that, after the present commencement the trade would be continuous.

LEETON CANNERY.

The Leeton (N.S.W.) Cannery has so far broken all previous records and the present season promises to eclipse all others. During the Apricot season, 180,000 cans were filled in one day.

CANNING IN ENGLAND.

14,000 Tons of Fruit Used.

OF the horticultural produce grown and canned in England at the present time, probably rather more than one-third consists of fruits, of which Strawberries, Raspberries, Loganberries and Plums are the most popular, and in order to demonstrate the extent of the present demands made by the canner on the fruit-growing industry, Mr. W. B. Adam, in a paper presented at the recent Royal Horticultural Society's Soft Fruit Conference, stated that the annual output of canned fruits in England is now approximately forty million cans, which absorb some 14,000 tons of fruit.

The selection of varieties for canning is governed by two sets of factors—those affecting the appearance of the products, such as color, firmness and freedom from blemishes

and malformations; and those affecting the edible properties such as flavor, texture and size of stone.

The suitability of varieties for canning has been studied extensively at the Campden Research Stations in the past eight or ten years, and the conclusion based on the Campden trials appear to be confirmed by experience in the canning factories.

Only cooking Apples are used for canning, and Bramley's Seedling is the most popular, although Newton Wonder and Annie Elizabeth also give good results. Wellington is also satisfactory, but neither Lord Derby nor Lane's Prince Albert is as good as those previously mentioned. The ideal Apples for canning are about two-and-a-half inches in diameter, reasonably even in shape, and as free as possible from deep blemishes.

CANNING IN CANADA.

Enormous Developments.

GREAT PROGRESS has been made by the canned foods industry in Canada since the beginning of the present century. In 1900 the value of production did not exceed £1,650,000, but by 1930 it had increased to more than £11,000,000, or six and one-half times as much. The principal commodities of the canning industry are fish, fruits and vegetables, milk and meats. In addition to being an important industry in itself, with a capital investment exceeding \$10,000,000, the canning industry provides an important outlet for the products of other industries such as the tin can industry, the wooden box industry and the paper and printing industries.

Not only has the development of the canned foods industry in recent years effected a change in the food requirements of the nation, but it has also brought about great changes in the relationship of foods to seasons. Years ago certain foods were entirely

out of the question at certain times of the year. To-day, fruit and vegetables of many kinds are to be had at all times of the year, not always with all the charm of the freshly gathered product, but with much of their original flavor and freshness. To the farmer this development has provided an enormously extended market for his products, and to the consumer in both city and country it provides cheap and wholesome food in great variety.

THE TIN IN THE CAN.

A Universal Service.

THE DAY HAS PASSED when people look with suspicion upon food contained in tin cans. Whilst this is fortunate for the canning industry, it is also largely due to scientific developments which have taken place in recent years, and the fact that the processing of fruit and other food commodities is now done under such hygienic and safe conditions that such food is quite as good, if not better, than foods in the fresh state.

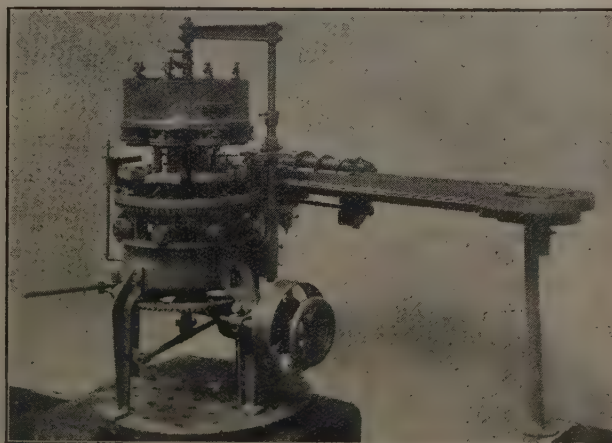
The applications of tin and its universal use in the canning of fruit, make its production and preparation an interesting study. Modern industry has increased the demand for tin from 10,000 tons to over 188,000 tons per year. Improved methods of mining and dredging has ensured the economic extraction of the ore, even when the concentration in the ore deposits is very low, and scientific smelting and treatment has improved the quality of the sheet tin used in can making.

The modern high resistance to corrosion has ensured safety in the use of tin cans for fruit and fruit juices, and public popularity for canned food has increased accordingly. Tin also predominates in the manufacture of bearings subject to severe service conditions.

The Austral Otis Andebar Cannery Equipment Pty. Ltd.

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South Melbourne, Vic.



PHONE: M 1257
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**8 VALVE
ECONOMY
SYRUPER**

Manufactured in our Works from Drawings of
Anderson, Barngrover - - - - **San Francisco**

CANNING AND JAM FRUITS.
(Continued from page 25.)

Even in the printing of the modern newspaper, tin makes its contribution to type metal in order to supply free-flowing and smoothness in the linotype machines so that not only does the canning industry owe much to the tin in the can but its official organ is prepared and circulated with the help of this versatile metal.

Sheet metal, coated with tin, provides the "tin-plate" for the millions of cans used by the canning industry every year, and so serves every home in the country.

Canada-U.S.A. Treaty.

THE canned fruit interests in Australia will be somewhat affected by the recent arrangement entered into between Canada and the United States regarding the duty imposed upon canned fruits imported into Canada. Under the old rate, U.S.A. fruit was taxed 5 cents per lb. and British-grown fruits 1 cent. per lb.

Under the new treaty, U.S.A. rate has been lowered to 4 cents per lb., whilst Empire fruits remain at 1 cent. It is considered that this reduction will not materially affect Australian shipments to Canada since the preference afforded is still equal to approximately 3/3 per dozen 30 oz. tins. Even so, Australia has protested to Canada against the reduction.

Other reductions favor U.S.A., however, in the matter of fresh fruits, and Californian growers are satisfied that the treaty will allow them to recapture some of their lost trade with Canada. In 1930, Canada imported about £10,000,000 worth of U.S.A. farm products, but in 1935 only £3,000,000 worth were imported, showing the decline which the application of duties effected in recent years.

In view of the proposed review of the Ottawa Agreements this year, plans for an Empire Canners' Conference are being made when it is anticipated that the Dominions will agree to some method of uniform preference to Empire goods and approach the Ottawa Convention with definite proposals, the result of the experience of Empire reciprocity since the last convention. One important matter which will be brought forward will be the application of fixed rates on canned fruits instead of the ad valorem method of assessing duties. This is claimed to be a much more satisfactory basis and would be to the advantage of Australia.

Prospects for 1936.

Present indications are that the present canning season will be an improvement upon 1935. In Apricots and Pears the quality to date is definitely superior, whilst the quantity within sight is greater than at this time last year. Peaches are yet rather doubtful, there seems to be indications that the crop will be lighter than last year, although the quality is good. As we go to press, prices have not yet been fixed, but will be announced

Seasonable Orchard Practice

Spraying :: Cover Crops :: Maturity and Care in Picking and Handling Fruit

PERSISTENT SPRAYING is essential in the keeping of fruit free from damage by codlin moth and the light brown Apple moth. Thoroughness is imperative, and the use of lure pots is advised to observe where the moths are in flight.

Cover Crops.

The importance of sowing cover crops is emphasised by Mr. J. W. Whelan in the "N.Z. Journal of Agriculture," the advice being as follows:—

Cover Crops.

To obtain the maximum benefit a cover crop should be ploughed under as soon as it reaches the flowering stage, while the correct time to plough such a crop under is about the last week in May or early June. Therefore, those growers who intend sowing such a crop are recommended to take the foregoing remarks into consideration, and sow accordingly. Cover crops are to be recommended, and should take a definite place in the routine of orchard practice, for they not only improve the physical condition of the soil and sub-soil, but add organic matter to it.

within the next fortnight. On the whole a favorable season can be confidently anticipated, and the million case mark of the past two seasons should be maintained or bettered.

MINIMUM EXPORT PRICES.

A conference of representatives of canning interests and the Canned Fruits Control Board, was held on January 23, when consideration of this year's London prices was the main item. Recommendations forwarded from London were presented, also production and seasonal conditions in all exporting countries.

A full representation of all packing floors was reported, and an early announcement will be made of the prices fixed for export.

CITRUS CANNING.

Comprehensive Survey Planned.

The Department of Agricultural Economics of the University of California, is planning an exhaustive study of the citrus canning industry in that State.

The research will be conducted in the fields of canned citrus fruits and juices, taking the form of tabulating the volume of citrus fruits going to processors, how it is processed, how distributed, and the methods of dealing with by-products. Behind the objects of the study will be an attempt to get greater financial returns to growers and a price stabilisation that will not unduly compete with the consumption of fresh fruits. The citrus processing in California is carried on in about 15 plants at present.

1935 Exports.

The exports of canned fruits from Australia during 1935 reached the total of 2,483,201 dozens of 30-oz. tins, or its equivalent. The following table shows how this total was made up and the quantities to each market. The figures represent dozen tins of 30 oz.

Country.	Apricots.	Peaches.	Pears.	Pine-apples.	Fruit Salad.	Total.
U.K.	305,731	1,128,943	630,434	79,079	14,688	2,158,875
N.Z.	39,850	56,678	5,778	1,723	—	104,029
Canada . . .	13,561	111,601	11,056	37,896	4,750	178,864
East	6,056	15,426	11,714	366	1,616	35,178
Miscellaneous	1,103	1,756	2,844	458	94	6,255
Total	366,301	1,314,404	661,826	119,522	21,148	2,483,201

In addition to the foregoing exports, 30 dozen Apricots, 190 Peaches and 150 dozen Pears, packed to 11-oz. size have been shipped to the United Kingdom.

SPRAYING PROGRAMME ENFORCED.

Useless Trees Grubbed Out.

Progressive Action of Renmark Pear Growers.

The Pear Growers Association of South Australia is to be congratulated on its successful efforts. In the Renmark area an inspector was appointed to enforce proper spraying or grubbing of useless trees in that area. As a result the Pear crop is cleaner of codlin moth than ever before.

By the use of lure pots the flight of moths was determined and spraying was attended to accordingly.

Leguminous cover crops, such as Lupins (blue or white), Peas or Vetches are recommended, as they supply nitrogen as well as organic matter to the soil. A seeding of from 40 lb. to 50 lb. Lupins per acre is recommended, and seedings of Vetches 1 bushel, Oats 1½ bushels, and Field Peas 60 lb. per acre should be sufficient for this purpose. A dressing of superphosphate from 2 cwt. to 3 cwt. per acre will greatly benefit the cover crop by ensuring an abundance of top growth for turning under.

Fruit Export.

During February, Apple export will commence, therefore, growers are well advised to anticipate the arrival of this busy period by having all necessary material to hand, such as cases, nails, strapping wire, labels, strawboards, and the various stamps necessary for branding cases.

Advantage should be taken of every spare hour and wet day in nailing the cases together and attaching the labels.

It is a good plan to soak the labels in water and attach them to the case while wet; this is a simple operation. Place the labels one by one in a pan of clean water, apply the paste to the end of the case (not to the label) with a brush, take a label from the pan of water and place it in position, and wipe off with a squeegee or clean cloth and allow to dry before stacking away.

The grader should be overhauled, cleaned, and well oiled before it is required for use, and similarly the engine or other power employed for driving the grader. If this work is completed before the packing season commences it will save considerable time and possibly much confusion later on.

In making the

first packing of fruit

for the season care must be taken not to remove from the trees immature, under-sized fruit or fruit not carrying the necessary color requirements. This can be avoided only by very careful picking, carried out by experienced pickers. These pickers should be familiar with the essentials that must be observed when picking fruit for export — i.e., color requirements, maturity, size, freedom from disease, and blemish.

The right degree of maturity for picking for export is a most important and to some extent a difficult

point to decide, chiefly owing to the thousands of miles that must be covered before the fruit reaches its destination. The most reliable guide when deciding if the fruit is sufficiently mature for picking is the distinct change from green to light yellow of the ground color, plus the ease with which the fruit parts from the tree.

Pickers should be instructed to keep their finger nails closely trimmed, and to use the palm of the hand as much as possible, not the thumb and fingers, when gathering fruit. By taking hold of the fruit in this manner, and giving it a sharp turn upwards, the fruit if sufficiently mature for picking should break clean away from the spur with the stem intact. Considerable loss results if the fruit is carelessly and roughly removed from the tree; not only is the stem pulled from the fruit in this manner, but fruit spurs provided by Nature for future crops are broken off.

Growers, in their own interests, should make every endeavour to eliminate as nearly as possible the heavy percentage of bruised or otherwise injured fruit that is usually to be found in almost every packing shed. This injury is caused by rough, careless and thoughtless workers, either in the orchard or shed, or both, and can no doubt be reduced to a minimum if reasonable care is taken during the process of harvesting and packing fruit. The overfilling of picking bags and orchard boxes should be avoided, also the dropping of cases of fruit. In fact, rough or careless handling of fruit of any description should not be tolerated in the packing shed or orchard.

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C. V. NUTT, President
Melbourne and Metropolitan Retail
Fruit-ers' Association.

The Melbourne and Metropolitan Retail Fruit-ers' Association

President, Mr. C. V. Nutt; Vice-President, Mr. H. Kruse; Committee, Messrs. Lewin, Brown, Child, Chetkett, Graydon, Delaney, Marsden, Canestra, Avitabile, Aston, Wilkinson, Norris, Holloway, Newman, Cooper; Secretary, Mr. E. W. Thompson; Asst. Secretary, Mr. Wm. Trivett; Treasurer, Mr. Chas. Mawdsley.

Delegates to Vic. United Retailers' Council, Messrs. Thompson and Mawdsley.



E. W. THOMPSON, Secretary
Melbourne and Metropolitan Retail
Fruit-ers' Association.

NEWS AND NOTES

Annual Picnic ∴ Selling Fruit by Number ∴ Roadside Trading on Sundays

The following information was courteously supplied for publication by Mr. E. W. Thompson, Secretary Melbourne and Metropolitan Retail Fruit-ers' Association.

As Wednesday, March 11 has been gazetted a holiday for retail fruit-ers and no fruit is permitted to be sold retail on that day, all growers are advised in their own interest to refrain from forwarding fresh fruit for that day's market. This applies to the metropolitan area only.

Early Grapes.

Now that the Grape season is rapidly approaching (a few have already arrived), a word of advice to growers who may be tempted to forward their fruit for the early market and secure high prices may not be amiss.

The last few seasons Grapes have arrived which have barely survived the test for maturity, whilst others have been condemned and probably sold for vinegar or something else which must be very disappointing and expensive to the producer, and to obviate this disappointment, growers would be wise to hold their fruit until it reaches that mature state so greatly relished by the consuming public.

At the time of writing (January 22), there are plenty of Peaches, eating Plums, Pears, Apricots and various kinds of berries on the market, besides Oranges, Bananas and Nectarines, and new season's eating Apples are also arriving, and as nearly all these fruits are at their best at the present time, it is obvious that unless Grapes are also very choice the prices they will realise will be very disappointing to the growers concerned.

Excessive Heat Causes Damage.

THE EXCESSIVE HEAT and high humidity in the beginning of the year has been very disastrous to all branches of the fruit and vegetable trade, and the loss sustained by every section has been considerable.

Recent experience shows that the moderate warm weather is the most beneficial for growers, wholesalers and retailers alike. Any casual observer at the Victoria Market during that period must have been astounded at the number of cases of Bananas, Tomatoes, Apricots, and other fruits that were lying about in an almost unsaleable condition, also bags of Beans which had in their earlier history been flooded with the abnormal heavy rains in the Gippsland district, and although wholesale agents were prepared to accept ridiculously low prices for same, they were forced to finally condemn same to the tip, which of course meant very serious loss to them, and the growers also.

Then again, a visit to almost any retail fruit shop or retail market revealed the losses suffered by the retail section of the trade, Bananas hourly getting black and soft, Apricots developing brown rot, the same with Nectarines and many of the up-country Peaches, vegetables not required by the public as it was too hot to cook them, the same with jam

fruits, so it is easy to realise the position.

However, those in the fruit trade are getting acclimatised to these tribulations and confidently look forward to better times and conditions than of recent years, the most annoying accompaniment to it being the almost universal remarks of the consuming public: "Oh this is the weather that suits 'you'," and similar remarks when purchasing their requirements.

Selling by Number.

Many fruit-ers report that as it is possible now to procure new season's Pears properly graded and the number marked on the cases, they are retailing them by number instead of by weight with satisfactory results, both to the general public and themselves also.

Pears Should be Wrapped.

They also suggest that those growers who have not previously wrapped their Pears would find it advantageous to their interests to try the experiment, as there is no fruit more susceptible to discoloration or bruises as Pears whilst being transported either in cases or even in paper bags whilst being carried home from the retailer's shop if at all ripe. The extra cost would be infinitesimal compared with the advantages gained, most buyers would be quite willing to pay it fully realising the result.

Retail fruit-ers greatly appreciate the adoption of the new regulation in reference to the number of the contents having to be marked on the cases of Apples, Pears and Quinces, and are also endeavoring to have regulations passed making it compulsory for all those fruits to be sold retail by number as well. The benefits to be obtained by that system are legion, and would be greatly appreciated by the consumers.

Roadside Trading on Sundays.

Replies have been received from the Fern-tree Gully Shire, Mordialloc, Mulgrave and Lilydale Shires by the Victorian United Retailers' Council that they will take action to curtail the roadside trading carried on in their districts on Sundays: most other controlling bodies are expected to do likewise.

Retailers' Monthly Meeting.

The monthly meeting of the Melbourne and Metropolitan Retail Fruit-ers' Association was held on January 9, 1936, and there was a good attendance of delegates present. A communication was received from the Federal Citrus Council of Australia, suggesting that one or two representatives of that body would appreciate the opportunity of attending one of our meetings in the near future, to discuss various matters in connection with the marketing of citrus fruit or any other subject that would assist in removing any misunderstandings that may exist as to the marketing of immature Oranges.

Delegates present considered that a visit from the Citrus Council representatives would have beneficial results for all parties concerned, and would also create a most harmonious feeling between the two bodies, and

possibly remove any misunderstandings that may at present exist. The Secretary was instructed to invite the delegates from that Council to attend any of our meetings at their convenience.

Complaints were made in reference to the manner in which some of the Lemons are being marketed, there has been many cases on the market, and although in some cases the number has been marked on the cases, when opened up, the numbers have been found to be incorrect, and the fruit all sizes and shapes, and no attempt whatever to grade same, the inspector's attention is to be drawn to same.

The death certificates of two of our late members were produced, and £20 was passed for payment to their next-of-kin in each case.

The Directing Committee of the annual picnic submitted their progress report, also their programme of sporting events which has been made still more attractive than in former years and was unanimously adopted.

Complaint was general as regards the large number of dealers operating in the early market of late on many occasions buyers do not know whether they are buying from dealers or genuine growers, and it was decided to refer the matter to a future meeting when representatives of the fruit-growers, market gardeners and other bodies would be present.

Inferior Tomatoes.

Although nature must be credited with the abundant crops of Tomatoes this season, the quality of most of them up to date has been very disappointing, in fact, it is hard to recall any recent year that it has been so difficult to purchase Tomatoes of really good standard. Although supplies are arriving from almost all Tomato growing centres there does not appear to be any improvement whatever, not even from districts that in previous years produced choice fruit, which clearly emphasises the fact that it is the season alone to blame, however, many growers persist in packing inferior fruit which can only be utilised for culinary purposes, and sold (when possible) at ridiculously low prices.

Those growers would be well advised to exercise a little

more care when packing,

and grade the ones suitable for table from those for cooking, by so doing they would obtain better prices for the former and probably almost as good a price as at present for the others as retailers would then be able to buy and sell according to their requirements, without continually turning and sorting them over and over again.

CONVICTIONS—VICTORIA MARKET.

At the District Court on October 3, the following convictions were recorded—

D. Lucas, fined 10/- for obstructing footpath. S. Kronssos, fined 5/- for a similar offence, also fined £1 and 2/6 costs for a breach of Section 25 of the Markets Act 1915.

D. Dalwood was fined £1 with 2/6 costs, for selling produce in a place other than the place appointed in the Queen Victoria Market, contrary to the Markets Act 1915.

SYDNEY RETAILERS WANT SHORTER HOURS OF TRADING.

Speaking on behalf of 90 per cent. of the fruit retailers of Sydney, Mr. T. Bowers told the gathering at a recent dinner of the N.S.W. Chamber of Fruit and Vegetable Industries that the gradual fall in wages in New South Wales had been responsible for reduction in prices, and had made for very keen competition in the trade. Extremely long hours were worked, for fruit shops kept open long after other shops were closed down for the night. The fact that a petition presented to the Minister for Labor and Industry was signed by 90 per cent. of the retail trade in the metropolitan area, clearly showed the feeling in the matter. All were against the long hours that fruit shops were practically forced to keep open.

He realised, as all other business men do, that late shopping hours do not make for increased turnovers, excepting in certain classes of shops, of a very special character. The perishable nature of the goods they sell ceased, years ago, to justify the late opening of any class of shop, and certainly as applied to fruit and vegetable shops, it has no justification whatever.

A question which might arise in the minds of some people in these times of depression is—How would the fruit market be affected? He would say not at all, as the shopkeepers would have more time to pay attention to outside business, and, with improved methods of trading and advertising, expansion in the sale of fruit and vegetables would be brought about. More scientific methods of handling and distributing would take the place of the "sit down and wait" style of doing business. From a retailer's experience of the fruit trade, he thought it unwise to lay too much stress on high prices. Fruit can only be sold at a price that the consumer can afford to pay, and nothing will stifle consumption more than high prices. Production based on economical and scientific lines should be the aim of growers in order that fruit be sold at a price that the bulk of consumers, who are the working class, can afford to pay.

PROSECUTIONS.

Officials of the Melbourne City Council and the police are alert at the Victoria Markets, Melbourne, to detect law breakers. Recently the following cases were taken to the courts:—

James McNalley—arrested in market for larceny, 15/11/35—Let out on bond.

Thos. Quinn and Leslie Newlands—arrested in market for larceny 12/12/35. Committed to reformatory.

D. Anderson—arrested in market 15/11/35. Charged with offensive behaviour. Fined £1.

Albert Nichol—appeared before District Court 28/11/35 for refusing to move his vehicle from a stall in the market after having been required by the Market Inspector to do so. Fined 20/-.

James Carter—arrested in market for larceny. Committed for trial and found not guilty—discharged.

CITRUS NEWS & NOTES

CITRUS CULTURE.

Hints for February.

CITRUS CULTURE is an increasingly important enterprise in New Zealand. The following hints for February, by Mr. L. Paynter, Orchard Instructor, were issued recently in the "N.Z. Journal of Agriculture."

Where there has been a prolonged spell of dry weather the young growth on citrus trees will be retarded and a loss of young fruit and foliage may also occur in situations where the moisture content of the soil is much below normal. The maintenance of a soil mulch by surface cultivation is essential to conserve moisture. The destruction of weeds is also very necessary, as much moisture escapes from the soil through these. Should dry weather continue some additional mulch will be required to conserve the moisture. Stable manure is preferred, but if this is not available, hay, straw, or any litter will serve the purpose.

Care should be taken not to allow the material to come in contact with the trunk of the tree, as bark injury may be caused by such contact.

Young shoots should be pinched back to a suitable point, so as to encourage side lateral growth. If left to mature, these shoots often grow 3 feet or more before developing side laterals, which in such circumstances usually grow only on the extremity, leaving an undue length of wood unfurnished. By pinching out the growing point of these shoots, as suggested, laterals are forced nearer the base, and growth encouraged where it is most useful. Should the weather become humid, spray with Bordeaux 3-4-40 to check verrucosis.

Where red scale is present, spray with a summer oil 1-40 when the young scales are on the move. From two to three applications at an interval of three weeks are recommended.

CURING OF LEMONS.

Various methods of treating and storing Lemons with a view to keeping them for several months have been tried. Storing carefully clipped fruit, vased and wrapped in paper of one kind or another, in sand or sawdust, and many other methods have not shown any to be superior to placing carefully handled fruit in boxes and simply storing away in a cool place from which light (which darkens the color of the rind) and wind (the effect of which is to harden the rind) are excluded.

The more equable the temperature, the better are likely to be the results, but a range of 40 to 65 degrees (or

even higher for short periods) appears to be satisfactory. During the spring and summer months a high humidity (if possible, 80 to 90 per cent.) is desirable in order to minimize shrinkage.

Further information on the curing of Lemons is contained in a leaflet obtainable free on application to the Department of Agriculture, Box 36A, G.P.O., Sydney.

VICTORIA.

Rochester.—On the whole, the citrus crop is developing nicely, though it is noticed that in different parts of the district the prospective yields of Navels and Valencias are variable.

Citrus Fruits in South Africa.

PRODUCTION STEADILY INCREASING.

THERE HAS BEEN a fairly considerable increase in the production and export of citrus fruits in the Union, but of more importance than the increased quantities being handled is that a marked improvement has been accomplished in the quality of the fruit produced for export. Oranges and Grapefruit are a good deal more important now than a few years ago, whilst Lemons do not show much of an increase, and there has been a noticeable reduction in the number of Mandarin trees. So much research work in connection with citrus culture is being conducted in South Africa, in the field and in the preparation of the fruit for marketing, that these fruits must prove increasingly valuable to the country, because the climatic conditions are favorable, and there is still some water to be controlled for irrigation, sufficiently close to suitable localities to render the growth of Oranges and Grapefruit successful.

kets, the principal ones of which are shown in the next table for the year 1933:—

Principal Varieties of Citrus Fruits Exported in 1933.*

Variety.	Shipping	
	Tons of 40	Cubic Feet.
Valencia	55,083	
Navel	44,510	
Grapefruit	14,664	
Seedling Orange	10,182	
Du Roi	1,883	
Lemons	1,023	
Jaffa	822	
Mediterranean Sweet	765	
Mandarins	530	
Joppa	269	
Seville	200	
Pineapple Seedling	137	
St. Michael	82	
Maltese Blood	63	
Lew Gim Gong	17	
Total exported in 1933	130,230	

Number of Principal Citrus Trees in South Africa†

Year.	Orange.	Mandarin.	Lemon.	Total.
	No.	No.	No.	No.
1911	985,601	404,189	172,856	1,562,646
1918	1,825,642	441,904	248,336	2,515,882
1921	1,810,990	376,080	160,710	2,347,780
1924	2,959,790	321,180	225,950	3,506,920
1925	3,559,280	341,900	270,540	4,171,720
1926*	3,633,130	307,340	192,920	4,133,390
1930*	3,883,350	272,260	196,890	4,352,500

*Trees, the produce of which is grown for sale.

†Official Year Book of the Union of South Africa, 1932-33.

Exports of Citrus Fruits from South Africa.†

Fruit.	1930.	1931.	1932.	1933.
	Tons.	Tons.	Tons.	Tons.
Oranges	106,096	91,734	100,276	113,832
Grapefruit	5,826	7,864	8,870	14,664
Mandarins	557	649	564	531
Lemons	275	298	1,463	1,203
Total, tons	112,754	100,545	111,173	130,230
Total, boxes	2,009,988	1,786,993	1,978,328	2,316,093

Note.—One shipping ton of 40 cubic feet equals approximately 173 standard citrus boxes.

†Official Year Book of the Union of South Africa, 1932-33.

Varieties of Citrus Fruits Grown for Export.

Valencia and Navel Oranges are easily the most important citrus fruits exported from the Union, but quite a number of varieties of the various kinds are put on the overseas mar-

*Fruit Production in the Union — Report No. 16.

—From Report by W. J. Spafford, Deputy Director of Agriculture for South Australia.

RED SCALE INVESTIGATIONS.

Field and Laboratory Tests With Oils.

SPRAYING TESTS with oils for the control of red scale on citrus are being made at Rochester by Messrs. C. J. Johnson and K. M. Ward, of the Victorian Dept. of Agriculture, assisted by Mr. J. K. Muir, district orchard supervisor.

Spraying tests are being made to ascertain the most suitable type of oil to control the insect, and also to determine the best time of the year for spraying. Laboratory work is being carried out at the biological branch of the Department at Burnley. It is hoped that an improved means of combating red scale will be achieved.

JAPANESE ORANGES FOR CANADA.

A Million Cases per Year.

Under a trade agreement between Canada and Japan, a million cases of Japanese Oranges will have landed in Vancouver during December and January. These Oranges, known as Mandarins in Japan, are admitted free of duty into Canada, and are mostly distributed by merchants in Winnipeg. The cases average about 60 Oranges, and retail to stores at about 4/- each, selling at 1/6 per dozen to consumers.

Orchardists!

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Nitrogenous - Phosphatic - Rich in Humus

"ORGANITE" is a general purpose fertilizer which is new to Australia. It is exceptionally rich in Humus, and it contains Nitrogen and Phosphoric Acid. In "ORGANITE" the Nitrogen is in two forms, the inorganic form, which is immediately available for the use of the plant, and the organic form, which will last for years in the soil, forming a continuous supply of rich plant food.

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Distribution of Australian Fruit

IMPORTANCE OF MANCHESTER.

(The Editor "Fruit World.")

Sir,—Before freight allocations for 1936 fruit exports are finalised, I would draw attention to the remarkable anomaly which has resulted, during recent years, in failure to utilise to a reasonable extent, one of the most important and valuable British markets for the sale of Australian fruit.

I refer to Manchester which, owing to its geographical situation and modern port facilities, must be admitted is the most economical and efficient distributing centre for imported produce consumed by the bulk of the population in the Midlands and North of England.

It is reliably estimated that 2,500 tons of Apples are consumed each week in the area within 50 miles of Manchester Docks, in which there are nearly 10½ million consumers, yet last year only 24,238 cases of Apples were shipped direct to the port from Tasmania, and 5,778 from Western Australia, i.e., just over 30,000 cases in all from Tasmania and the mainland.

For many years during the opposite season more than a million packages of Canadian and American Apples have been imported and sold annually in the fruit auction rooms at Manchester, and only one of two reasons can explain the failure of Australian exporters to use the port and market more fully, viz., either the importance of this great market is not fully realised, or, other interests than those of the growers are allowed to prevail when choice of destination is made for such percentage of fruit exports, as it is obvious will be required and ultimately consumed in the Midlands and North of England.

As misleading information may have been circulated regarding prices and realisations alleged to have resulted from the sale of Australian fruit at Manchester, I will be pleased to furnish authentic information on these points on request from bona fide enquirers.

Hundreds of thousands of cases of Australian fruit are ultimately disposed of in the Greater Manchester

area, and on all these not shipped direct, intermediate commissions and profits, as well as transport charges, are inevitably incurred, whilst additional handling results in more or less deterioration of the fruit.

Direct shipments to Manchester of all other varieties of Australian produce except fruit have steadily increased during recent years, and steamers which discharge at Manchester Docks are now berthed at the principal Australian ports at approximately fortnightly intervals. Sales by auction or private treaty can be effected through old-established and thoroughly reliable firms, to whom growers will be introduced if desired.

In conclusion, I would point out that handling facilities at Manchester are thoroughly efficient and modern, all steamers' berths and transit sheds have direct rail connection with all the main railway lines of the country, and the Fruit Auction Rooms in Manchester (where sales are held twice weekly) are attended by all the principal wholesale fruit buyers in the Midlands and North of England.

To summarise the position: Certain British markets have frequently been glutted with Australian fruit in the past, whilst one of the best and most important has been neglected.

By shipping to old established and reliable firms in Manchester net re-

turns are assured, as favorable or better than those obtained at other ports.

During the coming export season frequent facilities will be available for direct shipment to Manchester. What are Australian growers and shippers going to do to ensure that this great market in the Midlands and North of England is no longer neglected?

A copy of this letter has been forwarded to the Australian Apple and Pear Export Council, and The Tasmanian State Fruit Board.

Yours faithfully,

Wm. J. WADE,

Representative in Australia and N.Z. for the Port of Manchester.
8 Bridge-street, Sydney, N.S.W.,
23/1/36.

Growers should get into touch with
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And take advantage of their wide connection with importing firms in England, Canada and Europe.

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HARVEY FRUIT GRADERS

Colour and Count Grading

THE HARVEY IS 100 PER CENT. EFFICIENT FOR GRADING FLAT APPLES. IT STANDS THE FLAT FRUIT ON ITS TRUE GRADING EDGE, AND THE FRUIT IS NOT KNOCKED OFF ITS GRADING EDGE AND ALLOWED TO SLIDE ON ITS FLAT TO THE WRONG SIZED BINS AS IN THE CASE OF THE MECHANICALLY DRIVEN ROLLER.

PEAR GRADERS—These Machines can be made to any capacity to suit the small grower or the large Packing Shed. Twin Machines to handle two or more qualities simultaneously can be supplied. The pears are carried along stalk downwards and are not rolled. They can be thrown on to the sorting table, which is constructed in a special manner with a canvas belt to ensure no bruising. The sizing device of the "HARVEY" Pear Grader is provided with rubber belts running in the same direction, and arranged to carry along the pears motionless to their respective bins. The grading sections are adjustable to give any grade desired, and are independently operated. The Machine is fitted with spring floor bins, which obviate bruising. Can be operated equally well by hand or power, and is a fast and efficient Machine. Supplied in standard sizes or to any size or specification desired. In the London Market, where consignments have been particularly watched for mechanical grader marks, pears graded by the "HARVEY" Grader have opened up in perfect condition, being beautifully graded, and the pack showed up to the best advantage, and it is said, that no better fruit has been received from any part of the world.



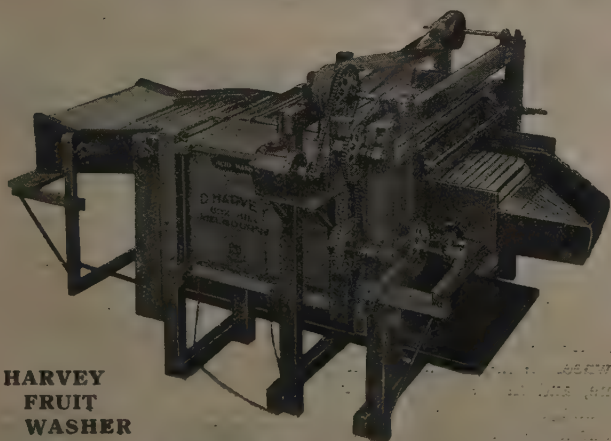
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START RIGHT—KEEP IN MIND THE FUTURE.

The above Grader can be used as the first unit with second and third units added later for color grading as season demands.

The "HARVEY" GRADER is unequalled for accurate sizing. The patented special new type grading element on the "HARVEY" APPLE GRADER is adjustable to any size desired. Each grade is adjustable without interfering with the grades on either side — no bruising. Multiple speed gear contributes to the efficiency and extends the working range by controlling the speed, as occasion demands. Spring supported packing bins of good depth obviate bruising.

Arsenate of Lead Removed from Pears and Apples By Using HARVEY Hydrochloric Acid WASHER



HARVEY
FRUIT
WASHER

The Cheapest and Surest Method of Washing Fruit. Enhances Appearance. NO BURNING—NO BRUISING can take place within the Machine itself, which THOROUGHLY WASHES the Fruit, removing all TRACES OF ARSENATE LEAD POISON and Hydrochloric Acid. As the season is fast approaching, please Order Early to Ensure Delivery.

PACKING HOUSE EQUIPMENT

Sorting Tables
Special Pear and Lemon Graders
Cannery Graders
Tomato Graders
Passion Fruit Graders
Citrus Graders
Dehydrators

Citrus Washing and Sterilizing Plants
Pear & Apple Washing Machines.
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HARRY MURRAY, Devonport.

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Motor Cars, Trucks, Tractors

THE TRACTOR INDUSTRY.

UNLIKE WHAT OBTAINS in the motor car industry, there is no annual show of farm tractors by which one can measure, in effect, the progress that has been made from year to year and note the new designs that have come on the market within recent days. Motor car manufacturers usually make a point of reserving for these periodical exhibitions their newer and more radical departures and improvements in designing, but in the case of the tractor industry, new types arrive from individual makers almost unobtrusively, and so it is impossible to say that any one particular year was marked by such-and-such a trend in design.

Actually, it is left to agricultural

shows to reveal to a lesser or greater extent what new moves have been made, with the Royal Show itself perhaps affording the outstanding collection of such machines. But there is no definite acceptance of any one show as a jumping-off ground for the introduction of a new model, and certainly no recognition by the trade of any particular events as the appropriate occasion for the exhibition of a newcomer. The result of this is that there is no violent contrast provided between the progress made in the current stage and what was fashionable only a relatively short time ago. The progress that is recorded occurs more progressively and continuously, so that if a new machine is produced, or even an improved idea rendered

possible, it is immediately given to the tractor-using public without waiting for a more or less formal opportunity to present it.

But though the tractor has a more limited field than the motor-car, in that the latter is more often used for pleasure than for business, yet there are improvements constantly being incorporated in this utility addition to industrial and agricultural equipment. Balloon tyres, weight reduction, power increase, cost reduction and adaptability and versatility of uses are only some of the improvements noted.

The cost of operation is comparatively small, with crude oil burners, and many forms of small utility tractors are now available. Reliability is one of the greatest improvements in the tractor within recent years, and with a growing motor-sense it has become easy for the average farm worker to keep his tractor in commission.

PETROL SANCTIONS.

Italy Provides Motor Spirit.

Italy is hoping to produce a substitute from sugarbeet for 20 per cent. of the petrol now used in the country.

Most of the petrol consumed in Italy is imported, but recent experiments with sugarbeets have led the Beet and Sugar Guild to decide to increase acreage under beets from 212,000 acres to 322,000.

This increase is to be made within the next three years.

CLEANING FABRIC.

In reply to a question as to how to clean dirty fabric on a car roof, the "Producers' Review," Queensland, gives the following advice:

The dirt may be removed by washing the fabric with a little soap and warm water, using a soft brush, but not putting too much force on the brush so as not to stretch the fabric. Sponge off all traces of soap with plenty of clean water, and when the fabric is quite dry apply a good boot polish with a soft brush. Polish well with a soft brush, and finally with a cloth, but do not bear too hard on the fabric. This treatment will not only clean the fabric, but will help to keep it waterproof and in good condition.

TYRE ECONOMY.

Most motorists who have owned one or more cars think that they know as much as the next man about tyre mileage. Sometimes they pooh-pooh the advice given by the tyre companies that correct inflation pressure is essential to long tyre life, and assert that they have secured better results by running with the tyres either less or more inflated. One does not wish to tilt at windmills, or to contend that there might not be a little latitude without fear of harmful results, but it is certainly significant that motor bus companies and owners of fleets of commercial vehicles which are looked after in accordance with a strict routine seem to break the records in respect of tyre mileage. Another important point is that the casings should be changed round on the car at least once during the life of the first treads. That is to say, the spare wheel should be used from time to time, and the front and rear tyres interchanged. Another aspect of tyre economy is the quality of a retread. It is far better to pay a little more to have a casing retreaded with a first quality tread that should give many thousand miles of service, than to go bargain hunting and perhaps in the long run meet with keen disappointment.

CHEVROLET RETAINS KNEE-ACTION ON MASTER DE LUXE MODELS.

"There is definitely no intention of dropping the independent front wheel suspension, which has proved so efficient and satisfactory on the Chevrolet Master De Luxe models in the hands of thousands of owners," said Mr. H. T. Curtis, managing director of Preston Motors Pty. Ltd., when interviewed by our representative today. "The 1936 Chevrolet models not so equipped," said Mr. Curtis, "replace the Standard Chevrolet models of last year only, which never had knee-action, and in no way alters the policy of Chevrolet to strictly adhere to the knee-action type of suspension for Chevrolet Master De Luxe models."

SIX MILLION MOTORS.

1936 World Production.

A forecast of the motor industry places the anticipated production for 1936 at the enormous number of six million cars and trucks, of which America is expected to supply five million, Great Britain one million and France, Germany, Italy and Russia each to improve upon last year's production figures.

In 1929, U.S.A. produced 4,794,898 cars and 826,817 trucks and last year Ford alone produced over one million units, whilst Great Britain's output increased 20 per cent. over 1934 in cars and 8 per cent. in trucks, representing an export value of over £12,000,000.

The world is on wheels, and the fruit industry, with others, is benefiting by the provision of quick transport made possible thereby, simplifying handling and giving the public fresher fruit.

FORD SPEND ONE HUNDRED MILLION POUNDS.

Many Industries Benefit.

Not only has Henry Ford built up a tremendous individual business and incidentally a huge fortune, but the manufacture of the world's most popular car reacts upon the industrial world in a hundred ways.

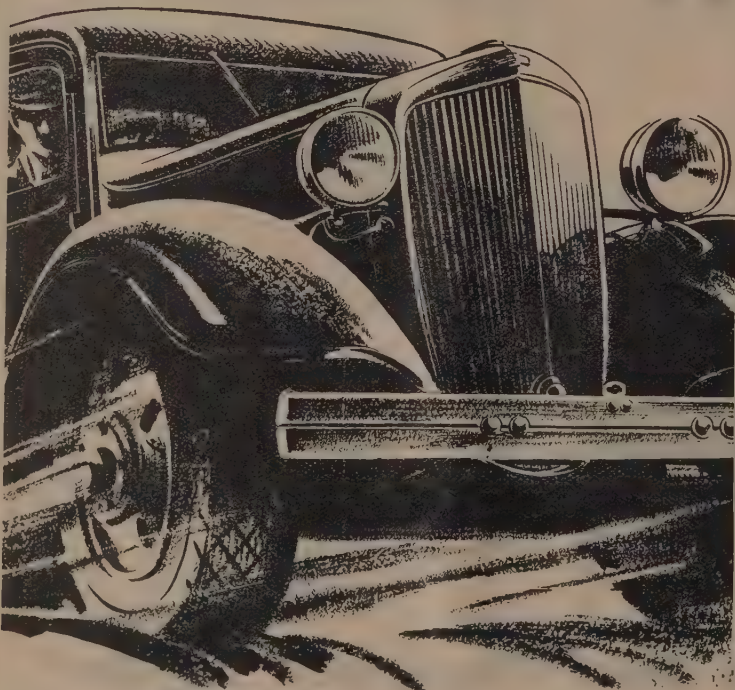
That the motor industry is a good customer of almost everybody is proved by the expenditure by the Ford Co. of £83,000,000 among 6,008 suppliers of commodities during the first ten months of 1935. Over 87,000 workers were employed in carrying to fulfilment the company's objective reached last October of building a million Ford V-8's last year.

The greatest single item in this list of expenditure is the all-steel body, which accounted for £20,000,000. Next to this came iron and non-ferrous metals which represent an expenditure of £15,000,000. On tyres £4,500,000 were spent and another £1,200,000 on crude rubber.

Material required for the finish of Ford car bodies cost £6,400,000. Glass absorbed a sum of £2,200,000, and £860,000 was spent on paints and lacquers.

This amount does not take into account the present developmental programme which involves a further sum of £5,000,000.

Money-Making Features of the new range of CHEVROLET TRUCKS



**MORE POWER.
BIGGER BRAKES.
NEW PRESSURE
STREAM LUBRICATION.
IMPROVED
HEAVY DUTY
REAR AXLE,
and many other
features.**

30 Cwt. Chassis
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Plus Sales Tax.

Features that have made Chevrolet outstandingly the world's most popular truck, are refined and improved in the new models for 1935. The famous Chevrolet Six-Cylinder valve-in-head engine now develops 70 brake horse-power at the low engine speed of 3,200 r.p.m. Cast iron pistons—proved successful by more than 2,000,000 owners—are retained. Improvements in the easily accessible heavy duty back axle made it sturdier than ever. The heavy duty clutch is now more powerful in final engagement, yet even lighter to operate than before. Brakes have been enlarged and are smoother, more certain in action, and more completely sealed against dirt and water.

Best feature of all is Chevrolet's low price. See the new models to-day. Compare them. feature by feature, with any other truck in the market, and you will realise that Chevrolet is the World's most popular truck, solely because it offers the World's finest value.

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Our Junior Page

My dear Smilers,

It is nice to be thinking of you again and to be in touch with you in our Juniors' Corner. You're very important people you know, although the grownups do not always think so. Perhaps you do not need to be told you are important. However, I know this, that in speaking to lots of men I find this is what they say: "I'll be satisfied if I can give my youngsters a better start than I had."

.. ..

We've all felt very keenly the loss of our loved King George. He was not only a truly great King, but he was a great man. I think he will go down to history as one of the greatest of our English Kings. In many ways he reminds me of that big-hearted fellow, King Alfred, not only a lover of his people, but also their true servant. When the Duke of Gloucester got back to England after his visit to Australia, his father, our late beloved sovereign, met him at a London railway station. Our own Tasmanian Appleland Prime Minister, Mr. Lyons, was there too: the King shook hands with Mr. Lyons and said something like this: "... Oh, well, we're both busy on our jobs, aren't we?" Quite a simple remark, but if you think of it, full of meaning. For King George was "on the job" all the time. From early morning till late at night, King George thought about his people and went about trying to be of service. What could be nobler, trying at all times to serve the people? To be a live King, one has to be a true servant. And I think it's like that with all of us. We get our truest joy when we are helping others.

I am sure my merry Smilers will keep these happy thoughts in mind.

While we are thinking about Royalty, I just want to say that our new King, Edward VIII. is wonderfully esteemed. I remember seeing him when he was in Australia, and I know how popular he was here—and he is just as popular all over the world. Our new King has a very warm corner in his heart for Australia and Australians.

.. ..

Please let me hear from more of my junior friends. I want to know more of you. Please write to me, telling me about your orchard, your school and hobbies, and if you have any ideas about competitions for our

corner, why, just trot them out! And when writing, tell me the date of your birthday, for I send to each Smiler a letter and a packet of seed as that happy birthday comes round year after year.

Those of you who keep stamps and would like me to send you some from time to time, please let me know. I get stamps from various parts of the world.

Now, cheerio, youngsters. I'm glad to print some letters this month, and will look for more as soon as you read this.

Meet me again on this page next month. Much love,

UNCLE JOE.

WALLACE HEARS FROM U.S.A.

Dear Uncle Joe,

I was very glad to see my last letter in print and to know that it was noticed by a gentleman in U.S.A. I received a letter from him last Saturday. He enclosed some American stamps which I wanted very much. This gentleman lives in a fruit-growing district and he said that he gets the "Fruit World."

I came tenth out of thirty-four pupils in our class at school, and I received a pass certificate. I also got my Merit certificate for high schools.

This year we have a good crop, but we also have a fair amount of black spot. Our Gravensteins this year are very light. Wishing you a Happy New Year and a successful one,

Yours faithfully,

Wallace Hutchinson,
Somerville, Vic., 30/12/35.

[Pleased to have your letter, Wallace, and to know that you received some American stamps from a "Fruit World" reader in U.S.A. You seem to be getting on nicely at school, and I wish you success and reciprocate your kind greetings for the New Year. Always pleased to hear from you. — Cheerio, Uncle Joe.]

MARJORIE WANTS A PEN FRIEND.

Dear Uncle Joe,

I am sending you a sample of our Plum "Climax," on which you will notice a star-shaped split at the end. What would be the cause of this?

The leaves of some of our Apple trees are turning yellow and then spots appear. Do you think this is armillaria?

My general pastime is farming—of which I get a good deal lately.

In the orchard we have five types of Plums, and five or six kinds of Apples: We also have Gooseberries and Passionfruit. Apples and Gooseberries are our main crops. I am interested in stamp collecting and my birthday is on May 26.

Your sincere Smiler,

Marjorie Cowey.

The Patch, Vic.

P.S.—I would like a pen friend in Canada or Western Australia.

[I sent the Plum to the Dept. of Agriculture and Mr. Pescott, the Senior Horticultural Instructor, says the Plums usually split as a result of excessive moisture. This refers particularly to Jap. Plums, and, as there has been a good deal of rain this season, particularly the hill country, this is no doubt the cause of the trouble. With regard to the Apple trees, root rot may not be present, but you would do well to send some samples of the foliage to the Dept. of Agric., 605 Flinders-street, Melbourne, so that the trouble can be determined.

I was interested to hear about your orchard and your hobbies: I am sending you some stamps by same post. I hope some reader in Canada, Western Australia, or possibly some other place will write to you. It is nice having pen friends. I have popped the date of your birthday in my Birthday Book. Cheerio. Keep smiling.—Uncle Joe.]

Dear Uncle Joe,

Just a short note to thank you very much for the packet of seed I received from you for my birthday. They will indeed make my garden bright. We are having terrific heat-wave now. Well, Uncle Joe, I had better stop, hoping to write a longer letter soon, and wishing our corner every success, from

Jean Smart.

Farm 1924, Yenda, N.S.W.

[Glad to have your letter, Jean, and to know the seeds arrived safely. Please tell your chums about our Juniors' Corner. My family of "Smilers" is growing, and I have room for plenty more.—Your cheery Uncle Joe.]

"Half an hour ago, Fred, I told you to sweep the shop out. Why didn't you do it?"

"I've been trying to, sir, but I have only managed to remove the dirt."

Smiling Sam: No, I never worry.

Dismal Desmond: Never?

Smiling Sam: Certainly not. In the day time I'm too busy, and at night time I'm too sleepy.

RIDDLES.

Q.—In what way is an elephant very different from other animals?

A.—If you cut off his head it is still joined to his trunk.

Q.—Why does the puss purr?

A.—For an obvious purr-puss.

Q.—Which is the easiest to say, fiddle-dee-dee or fiddle-dee-dum?

A.—Fiddle-dee-dee, because it is said with more ease (e's).

Q.—Why is the Junior Section like a hard-boiled egg?

A.—Because it cannot be beaten.

Q.—Which of your relatives depend on you for a living?

A.—Your uncles, aunts, and cousins, since they cannot exist without U (you).

Q.—Why is it difficult for anyone to steal a pair of shoes?

A.—Because one shoe is always left.

Q.—Why could we not live without leather?

A.—Because leather is our sole support.

"Run for the doctor!" cried the distracted mother. "Baby's swallowed a shilling!"

Jimmy rushed out at full speed, knocked the doctor up, and yelled: "Baby's swallowed a shilling."

The doctor seized his hat and bag, and sped back to the house with the boy. When he reached the door it was opened by the baby's mother, who wore a look of relief on her face.

"Ah!" exclaimed the doctor. "How's the baby?"

"You needn't have hurried, after all," replied the lady. "It's not as serious as we first thought. It's only a ha'penny."

FRUIT GRADING.

At Tyabb, Victoria, favorable steps towards the adoption of grade standards for Apples as recommended by the Victoria Fruit Co. Ltd., are being taken by the Tyabb Co-operative Cool Stores Ltd., and Messrs. C. Renouf and V. Borley.

The Co-operative Cool Stores Ltd. are extending their present buildings to enable the packing equipment they already have to be combined and converted into a four-quality plant.

Messrs. Renouf and Borley are just now erecting a spacious packing house which will be equipped with the latest four-quality sorting, sizing and packing equipment.

All of the foregoing equipment is being constructed and installed by the "Lightning" Fruit Grader Co. at West Brunswick.

Now that grade standards are being definitely determined and will be enforced by the Department of Agriculture, the necessity for better facilities to classify into three or more qualities with a minimum of cost becomes more obvious every day. At both the co-operative and private sheds, the sorting tables are of the roller type, which takes the fruit gently from the feed hopper, carries it along past the sorters, turning it over in full view of the sorters, exposing every side of the fruit, and delivers it in its respective grades to the different sizers. The rollers of the sorting table not only turn the fruit over in the usual manner, but, with the addition of the patented wavy motion, cause the Apples to roll gently from one side to the other so that very portion can be seen. Every precaution is taken to protect the fruit from injury. The patented scalloped rollers for preventing the fruit from rubbing against the sides, and for separating the various grades without the use of dividing boards are special features. There is a patented Pear roller to prevent the Pears from being chopped and injured.

Ship Direct to

MANCHESTER

(VIA THE MANCHESTER SHIP CANAL)

It is reliably estimated that—

2,500 TONS OF APPLES

are consumed EACH WEEK by the population of over 10,000,000 within a radius of 50 miles of the MANCHESTER DOCKS.

What is Your Share of that Valuable Market?

Rates of freight are the same from Australia to all British Ports—rail and road transport and handling costs in England can be saved by shipping DIRECT TO MANCHESTER the centre of the largest industrial consuming area in Great Britain.

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CAPTAIN W. J. WADE,
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THE MARKET GROWER

OFFICIAL ORGAN OF THE MARKET GARDENERS AND FRUITGROWERS' SOCIETY OF VICTORIA.
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 ALSO OFFICIAL ORGAN OF THE KOONDROOK & BARHAM TOMATO GROWERS' ASSOCIATION.

Improving Cucumber Varieties

INTRODUCED AND LOCALLY RAISED VARIETIES.
 CROSS POLLINATION :: BREEDING OUT DISEASE.

VALUABLE WORK in the improvement of fruits and vegetables is being conducted at the Hawkesbury Agricultural College, N.S.W.

Just now, while Cucumbers are on the market it is of interest to record the work of Mr. Shirlow, Assistant Plant Breeder, N.S.W. Dept. of Agriculture, in regard to this vegetable.

Among the slicing types the American varieties Fortune, Kirby Stay Green have compared very favorably with the local Improved White Spine, and they are now catalogued by some local seedsmen. Mr. Shirlow states that another American variety, Arlington White Spine, has now been under observation for two years, and it is promising both for size and yield, while its more abundant white mottling gives the fruit a more mature appearance.

Apple Cucumber.

Of the Apple types tested, all are heavy yielding, but Richmond Green Apple and Crystal Apple have the best appearance on account of the white spines, which do not turn brown at maturity like the Apple and Green

Apple. Richmond Green Apple, moreover, holds its green color for a long time before turning to a cream, which is in contrast to Crystal Apple, in which the light green color changes quickly to a white or cream.

Of the pickling types

three American varieties, Early Russian, Early Cluster and Michigan, compared well in yield and type with the variety, Boston Pickling, which is taken as the local standard variety of this type for comparison.

A heavy epidemic of mildew during the season did considerable damage in the breeding plot, and no variety of Cucumis sativus appeared to possess any useful degree of resistance. The West Indian Gherkin (Cucumis anguria), which appeared to have good resistance, was, however, crossed freely with commercial varieties, but it is not yet known whether these species are interfertile. Frequent attempts to cross the mildew-resistant African horned Cucumber, Cucumis metuliferus, which shows a very high resistance to mildew, have, unfortunately, always failed.

TOMATO VIRUS DISEASES.

Little Understood.

IN an article on "Some New Virus Diseases of the Tomato," by Dr. K. M. Smith, which recently appeared in the Journal of the Royal Horticultural Society (Eng.), some unusual claims are made.

The writer states that, with all the scientific research now going on, it is extraordinary that any undescribed disease can exist, yet new diseases are being reported. Three new virus diseases of Tomatoes have been located at the testing laboratory at Cambridge, having been supplied from various parts of Great Britain, which suggest that growers are becoming virus-minded and are on the look-out for such diseases.

Dr. Smith's theory is that they are being imported from abroad in plants or in some other form, possibly being carried in tobacco leaf. He even suggests that growers should not smoke while attending to Tomato plants, and, if smokers, they should wash their hands in some antiseptic before commencing work. Viruses, he claims, can be very infectious, and can spread from diseased to healthy plants by means of knives or hands.

Spotted wilt has appeared in England only in the last few years, and the control of this, or any plant disease, is by no means an easy matter. The infectious viruses are too small to be seen even with a microscope, in some cases, and growers may become careless, with the result that the disease spreads rapidly.

ONIONS WITHOUT TEARS.

Early Grown are Mildest.

Onions bring tears to the eyes because of the powerful volatile oil which they contain, but their strength depends largely upon when and where they are grown, says the "New York Packer."

Prof. W. R. Beattie, of the Bureau of Plants, U.S.A. Department of Agriculture, explains that early-grown Onions have a milder odor than those grown later in the season. Hot growing temperatures enable the Onion to produce more of the tear-producing oil than cooler temperatures.

The Italian red Onion is almost odorless when grown in that country, but increases in odor when grown in other countries; this has also been found to be the case with the popular Sweet Spanish types.

The Cornell University (U.S.A.) is experimenting with soils and localities in an endeavour to give Onion growers information which will allow them to produce mild-odored Onions, which will be more popular in flats and closely settled residential districts.

A SECOND CROP OF BROAD BEANS.

When the crop of Broad Beans is over, it is easy to obtain a second crop from the same plants. When all the pods have been picked, cut off the stalks to within 3 inches from the ground. The plants should then be fed liberally with liquid manure. New shoots will soon appear on the stumps of the old plants. When these shoots have grown a little, the strongest one on each stalk should be left and all the others cut off. An occasional feeding with liquid manure is all that the plants will now require.

2,000 BUSHELS TO THE ACRE.

Chemical Instead of Soil for Potatoes.

A revolution in Potato growing was foreseen by Mr. A. C. Pillsbury, a scientist of California recently when he described a method of growing Potatoes that would increase the yield so enormously that it is unbelievable.

To obtain this phenomenal per acre yield, you don't plough the ground at all, according to Mr. Pillsbury. Instead, you build a shallow tank on it, fill the tank with six inches of water, cover it with wire netting, cover the netting with a layer of wood-wool and plant the Potatoes in the wood-wool. It is then necessary to introduce into the water a prepared mixture of 11 chemicals which the Potato plants ordinarily draw from the soil. At first, the wood-wool will carry the moisture and chemical food to the plants, according to Mr. Pillsbury, and later the roots will grow down to the water.

"All the plant energy ordinarily devoted to gaining chemical food and moisture from the soil," said Mr. Pillsbury, "is now devoted to creating foliage and Potatoes. The result is the plant produces ten to 20 times as many Potatoes as usual, by number and by volume."

"Think what this will mean when we work out the right chemical formulas for growing the usual food plants," said Mr. Pillsbury. "About ninepence worth of chemicals and a tank in the back yard 20 feet square, will produce enough food to keep any family a year."

"In Japan, in Italy, even in England the saving of space will be revolutionary."

RED SPIDER.

Attacks Trees, Also Garden Plants.

Measures for Control.

This mite attacks a great many trees, also garden plants, vegetables and shrubs. Beans, Peas and Strawberries are commonly infested, and during the past few months heavy infestations have been seen on the foliage of Roses (states the N.S.W. Department of Agriculture).

Infested foliage becomes mottled in color, and in severe infestations the leaves wither and fall prematurely. The mites spin fine webbing on the undersides of the leaves and may also web the leaves together.

Warm, dry conditions favor the increase of red spider, infestations being considerably checked by cool weather and rain.

Satisfactory control of this pest can be obtained by spraying with lime-sulphur or dusting with sulphur, and, as it is necessary to reach the undersides of the leaves, it is better to use a dust on low-growing plants, such as Strawberries.

In Beans, red spider usually causes severe injury from January to April, and for the control of the pest in this crop lime-sulphur (1 in 100) has given better results than sulphur dusting.

For the best results, plants should be sprayed or dusted when the infestation first appears, and the treatment should be repeated after an interval of seven to ten days.

For tender plants of the flower garden the sulphur dust should be mixed with an equal quantity of kaolin or hydrated lime.

POTATO STANDARDS.

Export of Seed Potatoes from Victoria May be Prohibited.

Under the proposed Potato Standards, seed Potatoes may not be allowed to be exported from Victoria.

A conference of the Victorian Potato Growers' Association was held at Melbourne on January 17. Mr. E. J. Hogan, Minister for Agriculture (and president of the Potato Growers' Association) presided, when the foregoing and other matters were discussed.

Regarding seed Potatoes the fear was expressed that small Potatoes sold for seed would find their way into consumption, and thus defeat the move for improved grade standards.

Seed Potatoes can be sold within Victoria, but shall not be less than 1½ inches in diameter. They must be packed and branded as seed Potatoes.

The new proposed regulations provide that No. 1 Grade (export grade) must not be less than 2½ inches in diameter, or not less than 3 ozs. in weight. The proposed designation of a new local grade that was to be known as "table Potato grade," is to be altered to No. 2 grade. In this grade not less than 90 per cent. of the individual Potatoes in each package shall be 2 inches or more in diam., and the remainder shall be not less than 1½ inches in diam.

The grade for new Potatoes requires a minimum size of 1½ inch in diam. Export to be permitted only during November, December and January, while local sales will be permitted only during November, December, January and February.

A resolution was carried protesting against any lifting of the ban on the importation of Potatoes from New Zealand, which are debarred entry into Australia for fear of introduction of corky scab disease.

ONION CONTROL BOARD.

Will Marketing Act Apply?

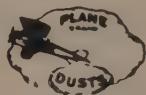
The result of the poll taken on February 3 is not yet announced. One thousand two hundred Onion growers were enrolled, and voted as to their desire, or otherwise, for the provisions of the Primary Products Act 1935 to apply to Onions. If a 60 per cent. majority of voters request it, a board will be set up, and similar control to that obtaining for dried fruits will be applied.

COOL STORING POTATOES.

W.A. Growers' Experiment.

Some Western Australian growers are experimenting with putting Potatoes in cool storage in an attempt to profit by higher prices in three months' time. A record crop in the south-western districts is reported, with prices during January so low that losses were experienced. To meet this condition, several large growers decided to cool store their stocks until about March, when it is anticipated a favorable price will be obtained.

This precaution was taken because of W.A.'s large crop, and an unexpectedly heavy crop in the Eastern States made shipments from W.A. unprofitable.



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 "Superior" (Rotary) Dusters

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Export & Commercial News

Fruit News from London Apple and Pear Export

Interesting Exhibitions ∴ Fungus Research Work ∴ Bananas "In the News" ∴ The Versatile Coconut

By L. Bruce Purton (Special Representative in London to "The Fruit World and Market Grower.")

A VOLUMINOUS REPORT has been prepared by the London office of the Australian Canned Fruits Board, dealing extensively with marketing problems on this side. It is of course confidential in its nature and for that reason not available to the press, but I am assured that there is nothing revolutionary in its recommendations. The report has been sent by air mail to the headquarters of the Board in Melbourne, and in due course Australian growers will probably learn more about it concerning the recommendations put forward.

Plethora of Fruit Shows.

In recent months there have been fruit, flower and vegetable shows up and down the country. London is steadily moving outward, and new suburbs demand more spacious gardens. The result is that a large number of the general public are becoming fruit and flower conscious.

The London Passenger Transport Board recently had an ideal exhibition at the Charing Cross Underground station. It was filled with fruit trees to suit gardens of all sizes.

At a recent fruit and flower show at the Olympia I saw some Tomatoes, the like of which I have never seen in Australia. They had almost a Peach appearance about them. The same applied to the Cucumbers. There were many varieties which I am sure are very unfamiliar to Australia. There were also new varieties of Potatoes and giant Onions. Although fruits grown in Britain were scarce this year (to the great benefit of Australian exporters) the judges at the various horticultural shows have been high in their praise of the exhibits shown.

Fungus That Rots Vegetables.

For the last twelve years Professor H. Raistick, the famous scientist, has been carrying on experiments and researches into certain classes of fungus growth known as moulds. The importance of the work was recently stressed in a lecture before the School of Hygiene and Tropical Medicine, in London. The lecturer said that species of moulds rot fruit, attack bread, meat and vegetables, and spoil stored grain.

He mentioned many processes in which the moulds were useful, among them the manufacture of citric acid from sugar and the ripening of cheese.

Dr. R. G. Tompkins, of the Low Temperature Research Station, Cambridge, mentioned, as an illustration of the serious results of mould growth, the loss of two to three per cent. of the total 20,000,000 cases of Oranges imported into Great Britain yearly.

Milk Bars Benefit Fruit Industry.

Milk bars have been making such rapid progress that efforts are now being made to obtain the National Mark for the fruit syrups that flavor the drinks served at them. It is hoped that a scheme may go through in the New Year that will guarantee that these syrups come from pure fruit only.

Some idea of what this will mean may be gathered from the fact that

if the milk bars — as is hoped — are selling milk at the rate of 20,000,000 gallons a year in a few months time, this will create an annual demand for 1,000,000 gallons of fruit juice.

About 3,000 tons of fruit

will be needed to provide it, and the syrups will have to be made in special factories by special plants. It is hardly too much to say, therefore, that the milk bars promise to create a new industry, from which both town and country will benefit.

Moreover, if these pure fruit syrups are used with no milk below the accredited standard, a pure and wholesome addition will have been made to the nation's diet.

Importance of the Coconut.

An exhibition held at Ceylon House, Aldwych, London, by the Ceylonese Government, emphasised the importance of the Coconut. One of the officials on duty there went so far as to say that the Coconut is the life-blood of Ceylon. The exhibition, by the way, was devoted entirely to the Coconut.

The Coconut can claim to be a component part, so I learned, of more than 200 different products. Here are some of them:—Coconut oil, poonac (cattle food), copra, coconut milk (for curry), toddy and arrack (tropical intoxicants), cocktails, jaggery (syrup), yarn, thatching, matting, ship's cables, brooms and brushes.

One of the coconut's most recent and interesting developments is that it is in demand for gas masks. The shell is burned for its charcoal, which goes into the filter section of the mask.

Problem of the Banana.

Bananas are nowadays much in the news. While the commission of inquiry into the state of the industry in Jamaica is on its way to the West Indies to investigate affairs, a deputation representing the Jamaica Banana Producers' Association is in London to present a memorial on the subject to the Colonial Office with a view to securing speedy Government intervention, so serious is the situation. The leader of the deputation (Sir Chas. Harrison) is reported as stating that "Jamaica's Banana production in a normal year is more than enough to supply the total needs of Great Britain and Canada, says "The Fruit-grower." Against the Colony's attempts to foster the Imperial and personal interests of grower and consumer alike within the Empire was opposed the virtual monopoly of the Banana trade of the world, secured many years ago by the gigantic American combine known as the United Fruit Co." Sir Charles added that hurricanes destroyed substantial portions of the Jamaica crop successively in 1932, 1933, and 1935, and many growers, faced with calamity, had been induced to dispose of their fruit to the United Fruit Co. because of the higher prices paid at the time of delivery. Pending the completion of the commission of inquiry, the deputation asked for emergency protective measures. No commission, of

The Victorian Fruit Exporters Handling Committee announce that their arrangements with the O.S.R.A. provide for the lifting of 573,705 cases of Apples and 336,185 cases of Pears from Victoria. The following is a list of steamers which will leave Melbourne on the dates mentioned.

Feb.

19. "Otranto"	London.
19. "Barrabool"	London.
22. "New Zealand Star"	Hull, London, Liverpool.
22. "Anchises"	London, Glasgow.
25. "Moldavia"	London.
28. "Port Dunedin"	London.

Mar.

3. "Orontes"	London.
3. "Raranga"	Hull, London, Liverpool.
6. "City of Manchester"	London.
7. "Imperial Star"	Hull, London, Liverpool.
10. "Leuna"	Hamburg.
10. "Mooltan"	London.
14. "Hobson's Bay"	Hull, London.
14. "Ulysses"	London, Glasgow.
17. "Orion"	London.
17. "Bendigo"	London.
18. "Devon"	Rotterdam.
19. "Banffshire"	London.
20. "Bitterfeld"	Hamburg.
21. "Port Melbourne"	Rotterdam.
23. "Tacoma Star"	Hull, London, Liverpool.
24. "Strathnaver"	London.
25. "Ceramic"	London.
31. "Oronsay"	London.

April.

1. "Port Auckland"	Hull, London.
1. "Somerset"	Hull, London, Liverpool.
1. "Taranaki"	Hull, London, Liverpool.
4. "Dunedin Star"	Hull, London, Liverpool.
4. "Opawa"	Hull, London, Liverpool.
4. "Autolycus"	Liverpool, Glasgow.
5. "Clan Farquhar"	Liverpool.
7. "Maloja"	London.
8. "City of Dieppe"	London, Liverpool.
8. "Mahia"	Hull, London, Liverpool.
11. "Esperance Bay"	Hull, London.
11. "Stassfurt"	Hamburg.
11. "Ascanius"	Liverpool, Glasgow.
15. "Balranald"	London.
18. "Clan Macarthur"	London, Liverpool.
21. "Strathaird"	London.
24. "City of Winchester"	London, Liverpool.
25. "Royal Star"	London, Liverpool.
28. "Westmoreland"	Hull, London, Liverpool.
28. "Orford"	London.

The summary of shipments is as follows:—

	Apples. Cases.	Pears. Cases.
February	76,100	44,400
March	215,500	124,620
April	282,105	167,165
	573,705	336,185

course, can overcome the hurricane handicap to which the island is periodically subjected.

In Italy the Banana is to be nationalised, a decree published in Rome fixing January 1, 1936, as the date when the trade is to become a State monopoly. Its sale is only to be permitted at specially licensed establishments, and dealers can sell their produce only to the State, at a price to be fixed annually. Offenders against the regulations are liable to a penalty of from double to ten times the cost of the Banana license, together with the confiscation of their stock-in-trade. Even all national vessels regularly engaged in the Banana trade, notwithstanding that they may be laid up, are to be commandeered by the State, and will become State property.

The problem of the Banana in Russia, however, is of a different kind from Italy, and concerns not so much its regulation as its scarcity. It is reported that no one has been able to purchase Bananas in Moscow since the revolution, although small quantities have been regularly imported for animals at the zoo.

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REPRESENTATIVES—

International Fruit & Mercantile Company Ltd., Melb., Vic., Australia; Pitts & Lehman, 129 Pitt St., Sydney, N.S.W.; and A. J. Walshe & Co., Hobart, Tasmania.

Victorian Fruit Marketing Association

Apple and Pear Export—Agreement with New Zealand—Grant of £100,000—Interstate Grade Standards.

THE monthly meeting of the Executive of the Victorian Fruit Marketing Association was held at the Board Room, Commercial Travellers' Association, Melbourne, on Friday, January 10, 1936, at 11 a.m.

There were present: Messrs. G. W. Brown (President), W. H. Carne (Vice-president), J. B. Mills, F. Moore, J. J. Tully, W. A. Thiele, J. W. Bailey, F. Cave, W. P. Hutchinson, F. R. Mellor, S. Brown, H. M. McLean, G. Douglas, K. V. Eagle, H. G. Sprague, J. M. Ward (Supt. of Horticulture), J. H. Gregory (Fruit Packing Instructor, Qld. Dept. of Agriculture), W. P. Mair, Tyabb; G. Anderson, Bacchus Marsh; and R. E. Boardman, Secretary.

Apologies were received from Messrs. E. Russell, A. S. Harrison, and C. H. Jost.

Leave of absence for Mr. Jost was granted until June.

Agreement With New Zealand.

The secretary tabled minutes of Conference between Executive Australian Apple and Pear Export Council and delegates from the N.Z. Fruit Export Control Board.

The Chairman reported that an agreement had been concluded with N.Z. on the basis of the joint export of 4,590,000 cases of Apples to U.K. during the months of March, April, May and June, the proportions being (as before) Australia 76½ per cent., New Zealand 23½ per cent. The agreement, when made in Sydney, was subject to confirmation on the return of the delegates to New Zealand; cabled advice had since been received that the agreement had been confirmed. Report received.

Australian Apple and Pear Export Council.

The minutes of the executive meeting of the Australian Apple and Pear Export Council held at Sydney, November 25-30, 1935, were tabled.

The chairman reported as follows:—

Grant of £100,000.

The grant provided by the Federal Government in 1933 and 1934 was £125,000. For 1935 the sum of £100,000 had been placed on the estimates, but the question had been raised as to whether this sum would be fully distributed to growers. A suggestion had been put forward that portion of this sum should be handed to State Departments of Agriculture for research work. The Council had taken the stand that as this sum was in lieu of freight reduction, it should be distributed to growers who shipped Apples and Pears to U.K. in 1935 on a per case basis. He, the Chairman, submitted that no portion of this money should be retained by State Agricultural Departments to relieve them of their responsibilities in relation to research work.

Continuing, the Chairman stated that a deputation, representing all the States had waited on the Prime Minister, and the Minister for Commerce at Canberra in support of the

request that the grant should be made fully available to growers as indicated.

Subsidised Apple Plantings.

The Chairman reported that at the recent Hobart Conference a resolution had been carried requesting the State Departments of Agriculture to discourage the planting of new areas of Apples until the crops from the present planted areas could be more profitably disposed of. At the Executive meeting in Sydney the subject had been gone into in more detail, as evidence was submitted that on areas in which State Governments were interested, Apple plantings were being continued. It had therefore been decided to place this matter before such authorities as the Water Commissions, Rural Banks, Lands Departments, and others. Report received and action endorsed.

New Apples.

Letters received from John Brunning & Sons, Somerville, stating that two Apples referred to in the Conference with New Zealand, namely, Kidd's Orange Red and Desert Gold, were being grown and fruited on Mornington Peninsula. Letter received.

London Conference, 1936.

The Chairman reported that the Australian Apple and Pear Export Council had decided to send a delegate to the Empire Fruit Conference in London, in July, 1936, and he, the Chairman, had been asked to go to represent the Council. It was hoped that all sections of the industry would be represented, and that separate committees would be set up for canned fruits, dried fruits, etc. The Ottawa Agreements would be reviewed. He submitted that the present British preference of 4/6 per cwt. on Apples and Pears should be on the same monetary basis as when originally arranged. In accordance with present dollar valuation, the present tariff should be 7/- per cwt. He would press for this adequate preferential tariff or alternatively, a closed period for Empire fruits.

Neglected Orchards.

Letter received re neglected orchard and pest breeding in country "back-yard" orchards. Mr. Ward stated that the Vegetation and Diseases Act did not give power for the destruction of trees; notices, however, had been served on the owners concerned, and if spraying were not attended to, prosecutions would follow.

It was decided to write to the district concerned conveying this information.

Spray Spreaders.

The Secretary reported that a letter had been sent to Mr. W. R. Jewell, Chemist, Dept. of Agric., stating that at a meeting of the Executive of the V.F.M.A., the question had been raised as to the constituent parts of spray spreaders for mixing with arsenate of lead, with particular reference to the possibility of caustic properties in the spreaders and the danger of burning the leaves when spraying. Particulars had been requested:

1. As to the spray spreaders now offered for sale by manufacturers, and
2. If any of the spreaders are likely to cause burning or other troubles when used with arsenate of lead.

A reply had been received from Mr. Jewell as follows:—

1. Spray spreaders on the Victorian market may be divided into three classes:
 - (a) Caseinates, e.g., calcium caseinate (casein and lime) and sodium caseinate (casein and soda).
 - (b) Oil emulsions, of which "white oils" may be taken as an example.
 - (c) A few more complex materials, usually of a proprietary or patented nature.

City Fruit Markets Sydney N.S.W.

F. Chilton, Established 1894.
Fruit Commission Agent,
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Established 1882.
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Stencils, Advice Notes, etc., on Application.

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Consignments of Fruit, Tomatoes, and Other Produce
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Cases Sent on Application.
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Phone: MA2605.

2. It is considered that spreaders of classes (b) and (c) above are not harmful when admixed with lead arsenate, provided the manufacturer's directions, as to strength and method of preparation, etc., are strictly followed.

It is considered that sodium caseinate is not suitable for use with lead arsenate, as burning is likely to result. Calcium caseinate should not cause trouble when mixed with lead arsenate, but it is questionable whether repeated summer sprayings might not result in a collective action which, under certain climatic conditions, results in damage to foliage and fruit.

In the discussion it was stated that acid arsenate of leads and leads with the particles finely divided were liable under certain dry and hot conditions to cause burning. Another factor that caused burning was the chemical composition of the water used for mixing the spray.

In addition to including Mr. Jewell's letter in the monthly circular, it was decided to arrange for its publication in the "Fruit World."

Horticultural Research.

A letter was read from the Horticultural Research Committee (H. J. Noonan, Hon. Secretary) stating that with reference to the deputation which waited on the Minister for Agriculture on July 10 last, requesting a grant for horticultural research work, advice had been received from the Director of Agriculture, stating that cabinet had considered the request, but a definite decision had been deferred.

Interstate Apple and Pear Grade Standards.

The Chairman reported that following the decision of the Hobart Conference to assist in the improved marketing of fruit in Australia, the subject had been gone into in more detail at the Sydney Executive meeting. Interstate committees were formed to deal with finance for an advertising programme. The Victorian Committee was meeting the same afternoon.

Mr. Ward submitted the proposals from the N.S.W. Department of Agriculture for grade standards to form the basis of interstate uniformity.

There was a lengthy discussion in which it was suggested that for interstate trade export standard for "extra fancy" and "fancy" should be adopted with modification of the color requirements. Possibly the present plain grade might serve as the third grade.

It was decided to refer the question of interstate grades to the committee meeting the same afternoon. The report of that committee to be referred back to the V.F.M.A.

Trade With Germany.

Mr. Thiele said he understood that with reference to Australian export to Germany wool enjoyed a preference of 25 per cent. It was decided to make enquiries to see if fruit could secure a similar privilege.

Next Meeting.

It was decided that the next meeting of the Executive be held on Friday, February 14, 1936.

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Interstate Marketing Standards.

A meeting of the Committee convened by the V.F.M.A. re interstate grades for Apples and Pears was held in the Board Room, Commercial Travellers' Association, Melbourne, on Friday, January 10, 1936, at 2.30 p.m. There were present: Messrs. G. W. Brown (Chairman), J. J. Tully, E. W. Thompson, F. Moore, H. M. Mc-

Lean, S. Brown, F. Cave, W. P. Mair, J. R. Vail, R. Woodward, A. S. Harrison, W. P. Hutchinson, J. M. Ward, G. Anderson.

After full discussion the meeting was adjourned until January 15.

The following are the Committee's recommendations:—

Grade Standards.

In order that interstate regulations may be uniform it is recommended that the question of the formation of grade standards be discussed at an interstate conference to be convened in Melbourne by the V.F.M.A. not later than January 29 and 30.

The Committee recommended the adoption of at least three grades for Apples, i.e., "Extra Fancy," "Fancy" and "Good," but the consideration of "Domestic" or fourth grade as apart from "Factory" grade, was a contentious matter which the Committee desires discussed by the V.F.M.A.

Pear Standards.

The grades recommended for Pears are as under:—

"Extra Fancy."

Pears described as "Extra Fancy" shall consist of sound, clean, well-formed Pears of one size and one variety, free from broken skins and from disease. Superficial blemishes from any cause may be permitted provided such blemishes do not exceed 10 per cent. by number of the total fruit in any case, and provided that the total area covered by such blemish on any Pear does not exceed the area contained in a circle having a diameter of one quarter of an inch.

None of the Pears in this grade shall be less than 2½ in. in diameter. "Fancy."

Pears described as "Fancy" shall consist of sound, clean, well-formed Pears of one size and one variety, free from broken skins and not seriously blemished or injured by any disease, but fruit slightly blemished by black-spot fungus, or from any other cause, may be permitted provided that the total area covered by such blemish on any Pear does not exceed the area contained in a circle

having a diameter of one quarter of an inch.

None of the Pears in this grade shall be less than 2 ins. in diameter.

"Good."

Pears described as "Good" shall consist of Pears of one size and one variety, free from broken skins and not seriously blemished or injured by disease, but Pears slightly blemished by black-spot fungus, or from other cause, may be permitted provided that the total area covered by such blemishes on any Pear does not exceed the area contained in a circle having a diameter of one-half of an inch.

None of the Pears in this grade shall be less than 2 ins. in diameter.

[Memo.—The Interstate Conference decided on a minimum of 1½ in.]

"Domestic."

Pears described as "Domestic" shall consist of Pears of one size and one variety, free from broken skins, and not seriously blemished or injured by any disease, but Pears slightly blemished by black-spot fungus, or from other cause, may be permitted provided that the total area covered by such blemishes on any Pear does not exceed the area contained in a circle having a diameter of three-quarters of an inch.

None of the Pears in this grade shall be less than 2½ ins.

The Committee is of the opinion that the policing of the regulations is a matter of grave concern, but no reasonable solution of this trouble is available. It is a recommendation that the retailing of Apples and Pears by count be compulsory.

Finance for Advertising.

For the consideration of the V.F.M.A., the Committee suggests that finance for advertising may be obtained by utilising one or more of the undermentioned:—

1. Orchard Tax: It is the Committee's opinion that this is the only means by which equity could be attained.

2. That a levy per case be instituted by Excise Stamp—same to be cancelled by purchaser.

3. That fruit marketed interstate be levied through agents by deduction

from A/c sales. Agents to contribute on a 50/50 basis. This principle to apply also to fruit marketed in the wholesale section of the Queen Victoria Market. That fruit marketed by growers in the Queen Victoria Market or other markets be levied per case by consent—same to be collected by the City Council or Municipal authorities.

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M. & W. Mack, one of the leading fruit importers of Covent Garden, London, are now represented in all Australian States, other than Victoria, by Mr. E. Johns, of the Australian Fruit & Produce Co., Municipal Markets, Sydney. The representative for Victoria is Esmond Russell Pty., Collins-street, Melbourne. The firm of M. & W. Mack has been established for over 30 years, and in introducing them to Australian orchardists it might be mentioned that they have a clientele throughout Great Britain, who include the best buyers of Liverpool, Manchester, Hull, Cardiff and Glasgow. Their cool store chambers are located on the selling floor of their Covent Garden warehouse, which is a big asset during the Apple and Pear season, when the market might be overstocked. They have a fleet of 120 fast motor lorries for transport purposes, which insures rapid and safe transport.

Every advantage is taken of the aerial mail service by this firm in making known results and final settlements, and Australian suppliers to this firm have had their settlements reach them in a few weeks after the sale of their fruit in London. Australian fruits are handled in large quantities, and the firm has recently secured one of the best selling positions at Covent Garden Market for the disposal all the year round, of pome fruits. The firm make liberal advances to growers on their consignments according to variety and quality.

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STOP PRESS

NEW ZEALAND.

Disastrous Storm in New Zealand.

Sympathy is felt with those who suffered in the disastrous storm which swept over the Auckland district of N.Z. Early reports do not indicate the full damage, as telegraphic communication was cut off. It is believed, however, that considerable damage was done to the orchards which will seriously affect the exportable quantity from this area.

EXPORT ENQUIRY.

On January 24 the enquiry by the Commission of Agriculture into export fruit marketing closed (writes our N.Z. correspondent). The decision is awaited with keen interest. In the giving of evidence it was quite apparent that the opinions of producers regarding controlled marketing were greatly at variance.

CROPS AND EXPORT.

Black spot and russet have taken their toll in the main export districts. The crop is distinctly lighter than in 1934—the record crop year for N.Z. The Dominion will have very little difficulty in keeping within the confines of the export quota for 1936. N.Z. will probably ship to all markets about 1½ million boxes.

PEAR EXPORT.

100,000 Cases from the Goulburn Valley.

There is great activity among Pear growers in the Goulburn Valley. A splendid crop of clean fruit is being harvested.

It is anticipated that 100,000 cases of Pears will be exported from the Goulburn Valley. Messrs. Perry's efficient equipment at Shepparton is appreciated.

SECURE YOUR

FRUIT CASES

... from a reliable manufacturer. ... Write for further particulars and prices.

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Agents for

"BLACK LEAF 40"

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All Orchard Requirements.

MELBOURNE SYDNEY

NEWCASTLE DEVONPORT

MARKET NOTES AND PRICES

NEW SOUTH WALES.

Sydney (28/1/36). — Mr. L. T. Pearce, market representative, Fruit-growers' Federation of N.S.W., reports

as follows:—Apples: Carrington 2/- to 8/-, Cleo. 4/- to 8/-, Gravenstein 4/- to 10/-, G. Smith 4/- to 8/-, Twenty Ounce 4/- to 7/-, Trivett N.S.W. 4/- to 12/-, McIntosh Red 5/-

to 11/-, Williams Favorite 4/- to 8/-, Demo. Tas. 5/- to 7/-. Pears: China N.S.W. 3/- to 4/-, Clapps Favorite 3/- to 5/-, Williams 4/- to 7/-. Comments on the Apple and Pear Position:



Cable Address: DAVIS, MELBOURNE.

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J. DAVIS PTY. LTD., Fruit Merchants

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Consignments solicited.
Telephone, F 3232.

One Trial Invited.
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Best Prices obtained.

Prompt Advice and Payment.

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Phone: F 5035.

Green Apples generally were easier, and due to most eating Apples lacking color their average price also was easier. Pears: Victorian Pears appearing are mostly plain grade and small in size, much of the fruit being deformed in shape and bearing scars. As a result this fruit is not moving as quickly as could be wished and prices are easier.

Apricots, Tas., 3/6 to 5/6 half bush. **Bananas**, N.S.W. and Qld., 7/- to 14/- trop. case. **Citrus—Grapefruit**: U.S.A. Cal. 25/- to 27/- per 1-1/3rd bush. case. **Lemons**, local, colored, 6/- to 12/-; few 14/- bush. **Vals.**, 3/- to 6/-, few 7/- **Comments on the Citrus position**: **Lemons**: Most colored Lemons are realising 11/- to 12/-, and supplies are not excessive from this State. **Vic.** supplies are more plentiful. **Vals.**: Demand was better to-day and fruit sold more freely at late rates. Breakdown is now more prevalent and much fruit is showing green in color.

Figs, N.S.W., 3/- to 4/6 quarter bush.; **Grapes**, N.S.W., Sweetwater 3/- to 4/6 half bush., Black Hamburg 7/- to 9/-, few 10/-, Black Muscat 10/- to 12/-. Supplies are gradually increasing, but are still only small in quantity. **Nectarines**, N.S.W., 3/- to 6/- spec. 8/- half bush., **Vic.** 5/- to 9/- bush. **Plums**, N.S.W., 2/- to 3/6, few large Narrabeen to 6/-, Wickson to 4/-, Angelina 6d. to 4/6 half case. **Vic.** 3/- to 6/- bush.

Burbank, Blood varieties and Narrabeen and Angelina comprise the chief arrivals. A few President and Giant Prune have appeared. There has been considerable wastage in Angelina of small size. Victorian supplies comprised Angelina and Ballina chiefly.

Peaches, N.S.W., 3/- to 5/- half case, 6/- to 8/- bush, Shanghai 3/6 to 7/- half bush., **Vic.** 2/- to 8/- bush. case; **Passionfruit**, N.S.W., 3/- to 8/- half bush.; **Pineapples**, Southern Qld., Queen 8/- to 14/- trop. case, Special Bowen to 15/-.

VICTORIA.

Market Report for January.

FOLLOWING the good trading for the Christmas rush, business quietened notably during early January, but returned to normal towards the end of the month. It was on about an average with other years. Supplies were good on the whole, and prices were satisfactory. The weather had some effect, not being quite as warmly settled as could have been desired. Still, a favorable month was reported.

Oranges sold particularly well early in the month owing to a falling off of supplies following the rains stopping picking in the citrus areas around Mildura. This gave a rather fictitious position for the period, and the market eased during the last week.

Apples: Gravenstein and other good early varieties started off well, eased towards the end of the month, and now general supplies are coming in increased quantities.

Apricots sold well while they lasted. Cheap lines were hard to clear as the factories would not take them, and they were left for market. Good quality and size were reported this year.

Peaches: Locals are selling well, country fruit suffered from brown mould following bad weather. Towards the end of the month, however, this improved. Prices for good quality fruit were good, but poorer quality samples brought relatively low returns.

Plums: Supplies were not heavy. Japanese varieties sold well, especially Wickson and Santa Rosa. October Purples made an appearance, and a few Washingtons came in. Prices were average and satisfactory for food samples.

Pineapples: Supplies light, though the prices were good.

Pears: The bulk of these were small refusals by the factories. As usual,

the demand in the last week was small. Ripe samples brought good prices. Goulburn Valley and Harcourt supplies experienced low prices. Mildura early samples obtained good prices but later supplies dropped.

Grapes: Raisin de Dames and Sultanias appeared and held well at good prices, but dropped in the last few days with extra quantities arriving.

Passionfruit: A few Queensland offerings sold well. Locals were light but held a fair price.

Bananas: As might be expected, the demand was affected by soft fruits. Demand slow and prices low.

Tomatoes eased with large local supplies, prices normal.

Peas and Beans were well supplied and held both price and demand right through. A good season for these varieties.

Melbourne (1/2/36): Quotations are at a bushel case (excepting where otherwise stated):—**Apples**, eating, 4/- to 8/-, few special lines higher; do., cooking, 2/- to 4/-, few specials higher. **Apricots**, 5/- to 8/-, few special local lines higher. **Figs**, 6/- to 8/- **Grapes**, Raisin de Dames, 10/- to 12/-, few higher; Sultanias, 9/- to 10/-, few higher; Muscatels, 16/- to 18/- **Oranges**, Val., 6/- to 9/-, a few to 10/- and 11/-, best counts; selected standards, to 12/- and 13/-; few specials to 14/-, and higher. **Lemons**, average standards, 5/- to 8/-, good standards to 9/-, few specials higher. **Grapefruit**, standards, 6/- to 8/-, a few 9/-; selected standards to 10/- and 11/-; specially selected to 15/- and 16/- **Strawberries**, 6/- to 12/- doz. punnets. **Nectarines**, 4/- to 6/-, few specials higher. **Peaches**, 3/- to 7/-, special local grown lines to 10/- and higher. **Pears**, dessert, 3/- to 5/-, few specials higher, inferior lines lower. **Plums**, 2/6 to 4/6, few specials 6/- and higher. **Bananas**, Qld., 6's, 9/- to 10/-; 7's, 10/- to 11/-; 8's and 9's, 11/-

to 12/- double case; few specials higher. **Pineapples**, Qld., 8/- to 12/-, few specials higher, best counts, double case. **Passionfruit**, 12/- to 16/-, few specials higher. **Tomatoes**, 1/6 to 4/-, inferior and over-ripe lines hard to clear. **Cantaloups**, 5/- to 7/-, few specials higher.

The Melbourne market manager of the Federal Citrus Council of Australia reports sales as follow:—**Vals.**, Sydney, 6/- to 8/-, few 10/-; **Vic.**, average standards and M.I.A., to 10/-, few 11/-; selected standards, to 13/- and 14/-; a few specially selected higher. **Grapefruit**, standards, to 8/- and 9/-; selected standards, to 10/- and 11/-; specially selected to 15/- and 16/- **Lemons**, average standards, to 7/- and 8/-; good standards to 29/-; specials higher.

QUEENSLAND.

Brisbane (17/1/36).—Messrs. Robsons Ltd. report as follows:—Our local fruit season is now in full swing, and consequently, the market is well supplied with all stone fruit, Apples, etc.

Choice new season eating **Apples** are selling to 10/- old season's such as **Vic.** Yates being practically unsaleable. Cookers are realising to 8/6.

Oranges coming forward now need repacking, in many instances, choice quality realising to 11/- case.

Lemons are selling to 16/-; **Passionfruit** to 8/- case; **Papaws** to 11/- trop. case, smoothleaf **Pineapples** to 7/6 case, roughs to 8/-.

Stone Fruits: **Plums** to 9/-; **Peaches** to 5/6; **Nectarines** to 8/-, and **Grapes** to 2½d. lb.; **Roma Muscatels** to 8/- case.

Vic. W.B.C. **Pears** are selling to 13/- case.

Bananas, 6's 5/6, 7's 7/-, and 8's 8/-.

Highest Prices.

A. S. BARR

Prompt Returns.

FRUIT EXCHANGE, BRISBANE, QUEENSLAND.

Wholesale Fruit Merchant and Growers' Agent.

A Trial Solicited. Returns Speak for Themselves. Shipping No. 19.

Established 1888.

Registered Telegraphic Address: "Barr, Brisbane."

ROBSONS LIMITED

(Wm. Robson, Managing Director.)

Guarantee Satisfaction to Clients. Send us a Trial Consignment.

FRUIT EXCHANGE, BRISBANE, QUEENSLAND.

Account Sales and Cheques Sent Promptly.

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Herbert Wilson Pty. Ltd.

WHOLESALE FRUIT MERCHANTS
AND COMMISSION AGENTS

Nos. 1 and 10, Wholesale Fruit Market, Melbourne.

Accredited Agents for Victorian Central Citrus Association
and Affiliated Association.

City Telephone: F 6444.

Private Phone: M 3055.

Bankers: National Bank of Australasia (Western Branch), Melb.

F. CHILTON

ESTABLISHED 1894

FRUIT COMMISSION AGENT

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Highest Market Prices

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"CHILTONS"

References:—Bank of N.S.W., Haymarket, Sydney
and Growers throughout Australia

CITY FRUIT MARKETS, SYDNEY

FOR A REAL SALES SERVICE Under the Personal Supervision of the Directors

CONSIGN YOUR FRUIT TO

Miner, Munday & Miller Limited

Fruit Brokers & Commission Salesmen

Covent Garden, London.

Sole Selling Agents in London for the South Australian Government for Fresh Fruits.

An All the Year Round Clientele for Apples, Pears, and Oranges. Sales by Private Treaty or Auction as desired.

N.S.W. Representatives.—Macdermott & Sheedy, Municipal Fruit Markets, Sydney.

West Aust. Representative.—A. Hicks, 18 William Street, Perth.

Victorian Representatives.—Messrs Gollin & Co. Pty. Ltd., 561 Bourke Street, Melbourne.

Bankers:—National Provincial Bank Ltd., Long Acre, London.

Cable Address:—"ORLEMFUIT," London.

Ship Your Oranges,
Lemons, Grapes to
New Zealand



All consignments for
this market will have
careful attention and
realise highest prices
if sent to

The Co-operative
Fruitgrowers of Otago
Limited, Dunedin

PERSONAL SUPERVISION
OF
EVERY CONSIGNMENT.

Cheques posted promptly.

Drop us a Line or Cable:
"Peachbloom," Dunedin.

NEW ZEALAND.

Dunedin (17/1/36). — Messrs. Reilly's Central Produce Mart Ltd., report heavy consignments of stone fruit arriving, and meeting a fair inquiry. Increased consignments of new season's Apples are now coming to hand.

Prices for Tomatoes remain firm, and smaller consignments of Christchurch hothouse are being received. It will be some time yet before outdoor grown will be ready.

Fresh vegetables are in full supply with a poor inquiry. Potatoes and Peas have a slightly better demand.

N.Z. Lemons show an improvement in price, although owing to the excessive rains in the north, the condition of fruit this season is very wasty.

Local Strawberries and Raspberries are still coming to hand, and crops of the latter are light this season.

Ripe Bananas have a good inquiry, and Niues and Samoans, ex the "Maui Pomare," arrived in excellent condition, and met a ready sale.

Prices, per half case: Outside Cucumbers 11/6, Nelson Tomatoes 6/6 to 12/-, Peaches 2/- to 3/6, Apricots 3/6 to 5/6, Cherry Plums 2/6 to 3/6, Burbank Plums 3/- to 4/-, cooking Plums 1/9 to 2/3, Jargonelle Pears 3/6 to 4/-, Nectarines 4/6 to 6/-.

WESTERN AUSTRALIA

Perth (24/1/36). — Apples: Jon., flats, 3/- to 7/-; Dunns, flats 2/- to 4/6, dumps 3/- to 6/-; cooker, flats, to 6/-; Cleo., flats 2/6 to 5/6, dumps 3/- to 8/6; other varieties 2/6 to 8/-. Citrus: Oranges, Val., flats 2/6 to 7/9, dumps 3/- to 10/-; Lemons, 5/- to 13/6. Plums: Shiro 2/- to 5/- case, Satsuma 2/- to 8/6, Wickson 3/- to 9/-, Burbank 2/- to 5/-, Santa Rosa 2/6 to 8/6, Cherry 1/- to 3/-, Black Diamond to 7/6, other varieties 3/- to 6/-. Peaches, 4/- to 13/-; Apricots, 4/- to 11/6; Nectarines, 4/- to 13/-. Pears, Bartlett, flats 3/6 to 7/-, other varieties 2/6 to 5/6. Grapes, open, white, 2/- to 5/-, closed 1/- to 3/-; colored 2/- to 6/-. Passionfruit, 3/- to 6/-. Tomatoes, local 1/- to 6/3. Bananas, 28/6 a crate.

SOUTH AUSTRALIA

Adelaide (31/1/36). — Apples (eating) 4/- to 5/- case, Apples (cooking) 3/- to 4/- case; Apricots 8/-; Bananas, 12/- to 16/-; Figs, 7/-; Grapes (dark) 8/-, (white) 8/-; Lemons, 10/-; Nectarines, 8/-; Oranges (common), 8/-; Mandarin 10/-, navel 8/- to 10/-, poorman 4/-; Passionfruit, 20/-; Peaches, 6/- to 7/-; Pears (eating) 6/-, cooking 4/-; Pineapples 14/-; Plums (light) 3/-, (dark) 4/-, Damson 6/-, Japanese 5/-, Prunes 4/- to 5/-; Quinces, 4/-.

FIRMS IN THE FRUIT TRADE

J. HYMAN & SON

(No. 6 of Series.)

IT is from the experience of over thirty years in the wholesale fruit business that Mr. J. Hyman personally directs the business of his company conducted at No. 51 in the Wholesale Fruit Market. But not alone to his individual efforts can be ascribed the success which has accompanied the company's service to growers and retailers alike. His son, Mr. H. Hyman, has for long taken a good deal of the responsibility of managing the business, and recently a younger son, Mr. E. Hyman, has been co-opted into the business.

The growth which has marked the firm's service in the past few years has necessitated an increase of floor space at their bulk stores at 454 Queen-street, and an extension of their fruit ripening facilities, and according to present indications, fur-

Interstate Business.

A large extension of the company's business with South Australian wholesale agents has been a feature of the interstate trade done by Hymans, who handle large quantities of all S.A. produce, particularly Tomatoes.

This is the only firm outside of the Square which is a member of the Wholesale Fruit Marketing Association. They claim to be the largest handlers of Tomatoes from the Northern Districts of Victoria. An extensive business in mushrooms is done during this season, supplies being drawn from all producing districts, most of which are distributed to canning factories.

A Favorable Location.

It is a fact that is acknowledged by everyone connected with the Whole-



Messrs. Hyman & Son's main selling floor.

Fruit Transport by Sea To Interstate Markets

IN REFRIGERATOR or COOL, WELL VENTILATED 'TWEEN DECK specially adapted for Fruit Carriage and fitted with powerful Electric Fans.

FAST MODERN PASSENGER VESSELS

Sail every Wednesday and Saturday for Sydney and Brisbane.
Sail every Saturday for Townsville and Cairns.

CARGO VESSELS sail Weekly for Sydney and Brisbane (Tuesdays).

SPECIAL REDUCED RATES OF FREIGHT.

FURTHER INFORMATION, SAILING DATES, ETC., WILL BE GLADLY SUPPLIED ON APPLICATION TO THE UNDER-MENTIONED COMPANIES AT MELBOURNE:—

HOWARD SMITH LTD.

A.U.S.N. CO. LTD.

ADELAIDE STEAMSHIP Co. Ltd. MCILWRAITH McEACHARN Ltd.

MELBOURNE STEAMSHIP Co. Ltd. HUDDART PARKER LTD.

ther extensions will shortly become necessary.

Policy of Co-operation.

The policy of the company has always been one of co-operation between growers and the ultimate consumers represented by retailers, this has been brought about by frequent visits to production centres and intimate personal contact with growers and the fact that all sales are personally supervised by one of the partners. A further strengthening of this co-operative spirit has been the attention extended to any suggestions made by growers.

sale Fruit Markets that Hyman have the choice position in respect to location. Being on the first corner of the approach from Victoria-street and the Metropolitan Markets, they are peculiarly accessible to their clients, having been fortunate in securing the first choice when the original drawing for position was made at the opening of the wholesale markets.

All classes of fruit, as well as Peas and Beans, are handled by this progressive firm, and clients are assured of continual and satisfactory service.

Quality Always.

In an interview with Mr. H. Hyman, he felt assured that the fruit industry in Victoria is in a very solid position, and he is optimistic regarding the future of the fruit business. This commendable optimism is, however, dependent upon quality fruit being supplied to selling merchants.

Mr. Hyman states that growers are definitely responding to the advice of merchants to pack and market the best quality of fruit possible, thus increasing the growing popularity of good fruit and contributing to greater consumption. He argues that so long as growers and merchants supply quality fruit consistently, so long will he demand for this class of fruit continue.

His company stresses quality packs at all times, and their business has proved that acceptance and price returns justify this policy. There is always a demand for the better quality samples and, fortunately, it is not affected even in glut periods. Merchants can always get satisfactory prices for well-packed quality fruit, returning more to the grower and leaving none of this grade remaining on the floors.

Personal and written enquiries as to market conditions are always welcomed by the company, and representatives will call upon new clients in any district upon request.

SPECIAL NOTICE TO FRUITGROWERS

All Members
under
Fidelity Bond

In response to numerous requests from growers for information as to who are members of the **Wholesale Fruit Merchants' Association of Victoria** the following list is given. All are members of the above Association, and are registered firms carrying on business in the

WHOLESALE FRUIT MARKET, MELBOURNE.

STAND NUMBERS ARE AS INDICATED IN PARENTHESES.

T. STOTT & SONS (26).

H. L. E. LOVETT & CO. (23).

A. E. PITT (14).

J. DAVIS PTY. LTD. (8).

W. S. TONG (31).

SILK BROS. PTY. LTD. (24-25).

J. G. MUMFORD (35).

GOLDEN VALLEY FRUIT CO. PTY. LTD. (15).

J. W. ROSS (13).

H. M. WADE & CO. (21).

DAVID SMITH PTY. LTD. (3).

SILBERT, SHARP & DAVIES PTY. LTD. (17)

W. A. WATKINS (5).

P. A. PATRIKEOS (36).

G. WOOLF & SONS (29-30).

F. CAVE & CO. PTY. LTD. (9).

R. CORNISH & SONS (5).

J. HYMAN & SON (51).

HERBERT WILSON PTY. LTD. (10).

FRANK BOOTH & SONS PTY. LTD. (16).

GEO. LISTER PTY. LTD. (12).

TIM YOUNG & CO. PTY. LTD. (18).

F. W. VEAR PTY. LTD. (28).

YEE HOP LOONG & CO. (32).

Office: 21 Wholesale Fruit Market,
Queen Street, Melbourne. Phone F 4866.

Correspondence is invited by the Association.

The Home Circle

THE DUCTLESS GLANDS—(Continued)

The Pituitary Glands "Growth Controllers"

(By Lois—No. 6.)

The pituitary is a small set of glands situated at the base of the brain, and is only about the size of a pea, and even though it is so small science has shown that this tiny gland performs some most amazing functions in our bodies. It consists of two parts, or lobes, and if one side only should develop the skin of the individual tends to go yellow, the hair fall out, and actually the bones of the face change. But that is only half of the consequences; the character changes with the face. A person with this pituitary upset will be very active-minded, with great powers of endurance, but cold and callous. Upset the gland the other way and the person becomes extremely sensitive and sentimental. It also controls the development of the "bony structure," and if the secretion of this gland is deficient from birth it produces what is known as a dwarf.

Effect on the Body.

Over activity in early life leads to gigantism. An excess of this secretion in adult life causes a change in the physical appearance. The skeleton enlarges, also usually the face, the hands and the feet. It also produces the obese type, with accumulations of fat, especially in the lower parts of the body, and legs, making the whole effect coarse and unlovely. It also has a definite influence upon the thyroid and the sex glands.

The Adrenal Glands — Accelerators.

The adrenals also are paired glands, lying in close proximity to the kidneys, and are composed of two separate types of tissue, which, in the mammal kingdom constitutes what is called the "cortex" and the "medulla." Science points out that the secretion of the medulla is not so necessary to life, but that the secretion of the cortex is most vital.

The medulla gland manufactures the very powerful secretion known as "adrenalin." Whenever we are suddenly called upon for a spurt of energy, or when we are aroused, or threatened with danger, some of this secretion is instantly slipped into the blood, causing the heart to beat faster, the blood rushes to the head, and the energies rise like the tide. This fluid is a drug, and if the medulla is overworked it has a destructive effect upon the heart, and a hardening effect upon the arteries. Anger and fear also cause an excess of this secretion to be discharged into the blood stream, and, for this reason, it is criminal to tease children or any dumb animal.

This is one of the reasons that makes flesh food an inferior article of diet. When an animal is to be slaughtered, it instinctively knows it, and becomes either fearful or enraged, and this secretion is instantly poured into the blood, and, with the cessation of life, the eliminative organs cease their work, the poisons are lodged in the tissue, and so the "flesh-eater" has to get rid of the animal's poison as well as his own, thus creating a heavy task for his eliminative organs, especially the kidneys. **Masculine Women and Feminine Men.**

Science explains that the cortex secretion is much more complex. In adolescence it governs the development of the masculine and feminine elements in character. An overgrowth of this gland in a female re-

sults in some unpleasant effects. It causes a beard to grow, or heavy hair growth appears on the face, hairy limbs and masculine voices develop.

In the male, an overgrowth produces what is known as the effeminate man. It also aids in the maintenance of the normal pressure of the blood. The secretion of this gland is imperative to life, and its removal or injury means death to the individual.

The Pineal Gland—The Illuminator.

This gland is a very tiny bit of tissue lying near to, but behind and above the pituitary in the top of the head. Science is still investigating it, but they believe it to be also one of the regulators of development. It was regarded by the ancients as the third eye (mind) of the body, and metaphysics teach more about the significance of this gland than does science.

These great scientific facts and discoveries certainly illuminated the human pathway with a wonderful knowledge, and it is up to each one of us to make use of this knowledge, and "know ourselves." If we will not, well then it is just going to be "too bad for us."

"Yours for a better understanding of life."—LOIS.

MORE HELPFUL RECIPES.

Asparagus Rolls for Lunch.

Cut very thin slices of wholemeal bread and butter, place a stick of cooked asparagus in each, roll tightly after adding a little salt and cayenne, garnish with sprigs of parsley and serve with lettuce leaves, sliced tomatoes and grated cheese.

A Healthful Way With Greens.

Place in casserole dish green Peas (tender), with a small sliced Onion; over them and a heart of Lettuce well washed add just enough water to make a steam. Cook until tender. Make a thick Parsley sauce with rub of butter and pour over the greens. Serve from casserole.

A Delicious Breakfast Dish.

Slowly boil in fresh milk one large Onion for each person. When cooked thicken the milk with wholemeal flour, without removing Onions; add a little salt to taste. Then drop in one Tomato for each person. Do not boil Tomato, but allow to remain in sauce until tender. Serve on buttered, crisp toast.

American Salad.

Place a cupped Lettuce leaf on each server. Put in centre one large Tomato and cut downwards in the form of a cross, allowing to open like petals. Intersperse with petals cut from hard-boiled egg. Fill centre with dressing, and garnish with small Lettuce leaves standing in centre.

Natural Dressing.

Two tablespoons garden honey, good ½ cup of sweet or sour cream (thick), salt to taste, juice of half a Lemon. Mix all together thoroughly.

FRUIT AND HEALTH.

Fruit should not be regarded as a luxury. It is an essential article of diet. Some folk have perhaps a dish of Apples and Oranges on the side-board often as a display.

This is not enough. Fruit should appear regularly at breakfast, lunch and dinner. If the addition of fruit

First Aid to the Injured.

Burns and Scalds.

Some Important Don'ts.

Don't use cotton wool for sopping a burn or scald. The fibres of the cotton wool are likely to stick and tear the blisters. Use light gauze bandages or a clean handkerchief for sopping on solutions.

Don't allow a solution to dry on a burn. Change to moist pads frequently, or keep pads fairly moist by pouring the solution on them.

Don't attempt to open a blister. Always touch a blister lightly, for an open blister is a beginning point for an infection.

Don't pull clothing off electric burns. Soften all clothing with olive or similar oil before attempting to remove it. Cut the rest away so that there will be no drag.

Don't forget that burnt surfaces absorb drugs quickly. A toxic or irritant drug or antiseptic need not be applied to a burnt surface. Iodex ointment is bland, antiseptic and healing. Apply freely and bandage lightly.

First Applications to Special Burns:—

Acids—Soapy water and baking soda.

Alkalies (potash or lye) — Vinegar.

Carbolic Acid—Wash with alcohol every 15 minutes for an hour.

Tar—Turpentine or olive oil.

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A superficial burn will usually heal quicker than one that is deeper. The severity of a burn, however, is usually greater in one of extended area than in a deep burn. The reason for this is because a raw surface is easily infected, and, second, the burnt skin acts as a poison when absorbed.

First aid treatment consists in preventing septic infection, combating early shock and preventing, as far as possible, any deforming scars.

For ordinary burns and scalds, a strong solution of baking soda in water, or even of flour and water, will relieve the immediate pain, but either method is not antiseptic. The best way to treat a burn or scald is to butter on a thick coating of Iodex, and keep in place with sterile gauze or a light bandage.

It has the advantage over former methods in that it is bland, non-irritating and yet antiseptic. It does not adhere to the granulating surface, consequently it makes a comfortable dressing, which can be removed without causing pain, and on burns which involve large areas it seems to prevent the absorption of the poisonous matters from the burnt skin. At the same time, it minimises the formation of scars and contractions.

It has another advantage, in that it is easily removed by the physician when he comes, so that he is able to see the full extent of the burn or scald.

to the daily diet helps to keep children fit, saves doctors' and chemists' bills, then it should not be regarded as a luxury.

Acid fruits, like Lemons, Grapefruit, and Oranges, are purifying, laxative and anti-bilious, and valuable vitamins are present; Apples also act as a laxative, and they possess phosphates.

Figs are a laxative, so are Dates. Raisins, also, are good for this purpose; they possess potash salts as well as iron.

All fruits are best eaten raw, because their acids and salts are stronger then. Really ripe fruit contains enough sugar in itself.

Beekeeping

BEEES ASSIST FRUIT.

The public has but little appreciation of the place which bees fill in the nation's agriculture. If the honeybee were to be suddenly removed it is probable that the output of certain crops would decline to an alarming extent. Numerous experiments with fruit trees screened to exclude all honeybees indicate that under average conditions a very substantial portion of the crop is due to their visits, says "The American Bee Journal."

Any estimate must of necessity be speculative but if we are to judge by results of experiments under controlled conditions it is very conservative to credit the bees with 10 per cent. of the crop of such fruits as Pears, Apples, Plums and Cherries. Some varieties appear to yield very sparingly in the absence of the bees. Cucumbers and melons likewise depend largely upon the bees for pollination and it is probably safe to say that more than 10 per cent. of these are the result of the bees. Add to the value of these crops the yield of seed of alsike, sweet clover, and white Dutch clover which comes by their assistance and we have a very tidy sum to their credit.

The value, in comparison, of the honey crop is very small. One may very safely conclude that for every dollar which the beekeeper gets from the sale of honey and wax, his neighbor secures at least five because of the larger crops of fruits, vegetables or seeds resulting from the services of the bees in the distribution of pollen.

BEE DISEASES.

Australia and America Co-operating in Research Work.

Experiments are being conducted in U.S.A. with Australian queen bees, and it is hoped that the result will be the breeding of a type resistant to foul brood—a disease which thrives in cold and wet climates, and which has caused much damage in Australia.

Apiarists in various parts of Australia have decided to co-operate with the American research workers.

More research work on bees is urgently needed in Australia.

HOW TO HANDLE A NUCLEUS COLONY.

It is often preferred by the beginner in bee-keeping to purchase a nucleus colony of bees for a commencement, and it is a very good way to make a start. The nucleus contains three full-depth, standard-sized frames with sufficient bees, brood and stores, to allow of independent building up.

When a nucleus colony is received, the hive should be placed on a stand in a selected situation. The cover should then be removed and replaced in its right position. The wire screen over the frames need not be immediately interfered with. The bees should next be liberated by opening up the hive entrance, giving a puff or two of smoke to prevent a rush. Then place a folded bag over the hive cover, a weight on top, and leave the colony to settle down.

Once the bees have settled down, a matter of a few hours generally, the combs, bees and all may be transferred to a full-sized hive, which should be prepared in readiness to receive them. During transferring manipulations, the bees are generally easy to control and very little smoke should be used. Just a puff or two through the wire cloth screen whilst removing it is generally sufficient.

BEEKEEPING—

(Continued from Page 39.)

HIVE VENTILATION IN HOT WEATHER.

It is necessary to provide ample ventilation in the hive for the bees during the summer months, particularly during heat waves. When bees cluster outside the front of the hive it is ample proof that the colony is suffering from insufficient ventilation. Provision of additional ventilation is simply a matter of raising the hive-body from the bottom board at the entrance and inserting a couple of thin wedges at each corner. An extra quarter inch in the depth of the entrance may make all the difference.

A CONVENIENT WATER SUPPLY.

In the vicinity of towns and villages, where bees may cause a little trouble about the neighbors' water supplies, or where bees have to travel a distance during the warm weather, it is advisable for the beekeeper to provide a water supply convenient to the apiary and encourage the bees to use it. A large quantity of water is used by bees during the hot weather and the December issue of the N.S.W. "Agricultural Gazette" shows a recommended trough which has been found to be very effective. It is divided into three compartments. The centre compartment is filled with water, and the two ends one, to which it is connected, with gravel and sand. The water compartment is kept covered, the bees obtaining supplies through the moist contents of the compartments at each side.

TEJ, HONEY WINE.

Popular in Abyssinia.

Ethiopia is teaching the world many lessons. Honey is recognised as a sustaining drink in that land of hard conditions of life. A honey-made wine, named Tej, is a popular drink in the desert of Ethiopia. It is also used in their many religious celebrations, as a spiritual aid in warfare and as a source of sweetness and strength. Drunk around the camp fires it rekindles their fighting courage without any bad after effects.

Pig Pen

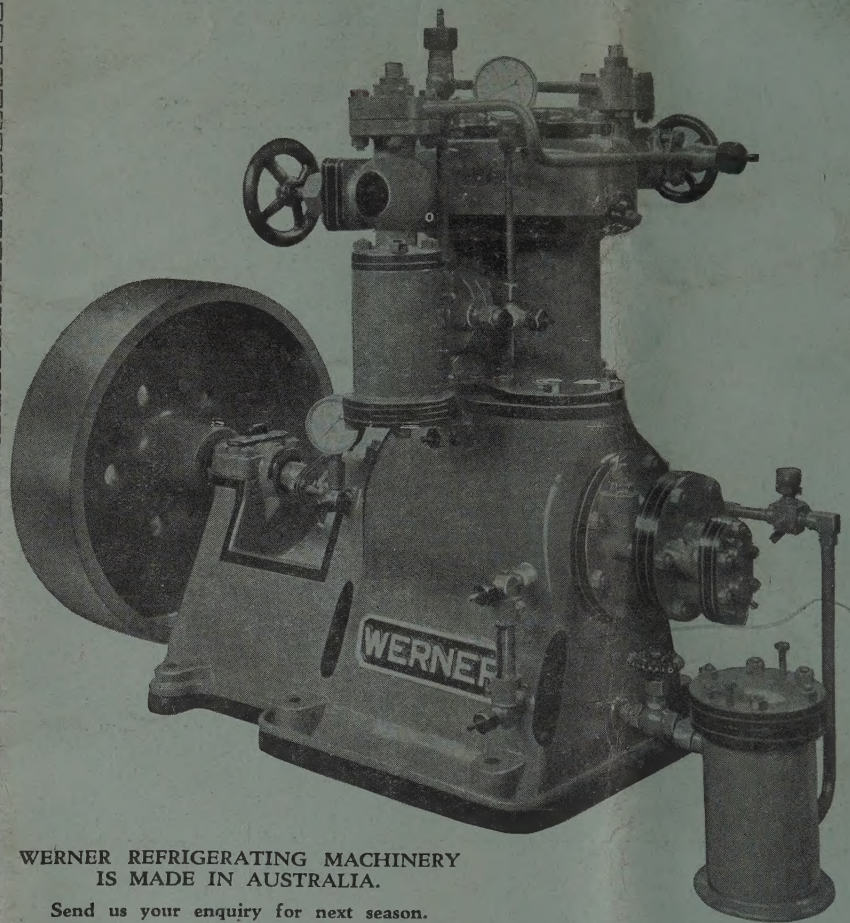
PEACHES AND PIGS.

Danger of Broken Teeth.

Peaches do not have much more feeding value for livestock than Apples, and there is another very serious objection to feeding them to pigs. This is that the animals are determined to break the seeds in order to get and eat the kernels. In this act many of the pig's teeth are broken and serious damage is done to them. It requires a very great amount of pressure to break the pits of some of the big-stoned yellow varieties, and by the time a pig has fed upon Peaches very long it develops a considerable amount of the trouble known as "black tooth." This is simply broken teeth, that turn dark after they are broken. Such teeth become very sore and tender, and their possessors cannot feed well on any but soft feed. It is a common expression that, "Pigs with black teeth do not fatten." This is because their teeth turn dark when broken and are so sore that they will not eat enough of such food as ordinary field maize to fatten them. Avoid letting the pigs have any opportunity to eat Peach seeds, and if they have any black teeth, feed them soft cooked foods.

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ASSISTANCE TO IMPORTERS OF PEDIGREE STOCK FROM THE UNITED KINGDOM.

The Department of Commerce announces that as a result of discussions by the Australian Agricultural Council, the Commonwealth Government announces the introduction of a scheme for rendering financial assistance to importers of pedigree breeding cattle, sheep, milch goats and swine from the United Kingdom to Australia. In regard to swine, the only breeds eligible for assistance are Berkshire, Large White, Middle White and Tamworth.

The assistance will take the form of a contribution towards the expenses incurred in the importation of the animals, but no assistance will be rendered in respect of the cost of the animal itself.

Shipping companies will extend a cheap freight and all transport expenses will be shared by Government (two-fifths), Commonwealth Bank (one-fifth), and importer (two-fifths).

The scheme will apply only to animals for which a certificate of full re-

gistration by a recognised stud society is furnished, together with the vendor's certificate of breeding and production record, if any.

The assistance will apply only if the stock are retained by the purchaser for at least two years from the date of importation. Should they be sold before the expiration of the two-year period, any assistance which may have been granted under the scheme must be refunded.

FEEDING SOWS BEFORE FARROWING.

In reply to a question as to the best method of feeding a sow before and after farrowing, Mr. H. B. Barlow, Chief Dairy Instructor (N.S.W.), says that probably the best treatment for a sow, before farrowing is grazing in a good grass paddock; if necessary supplemented with sufficient grain ration (wheat, barley or oats), to keep the sow in good condition.

Near farrowing time it is very helpful if the sow can be given 1 to 2 gallons of skim milk per day and the grain ration can be slightly increased.

A mixture of crushed oats and barley will help milk production. A sow should not be too fat at farrowing time, but should be in good medium condition. After farrowing feed a good milk producing ration consisting of green feed, crushed grain and skim milk. Grain and water alone is unsatisfactory. A sow with litter should always have water available. It is not necessary or advisable to keep a sow with litter confined in a small sty. If good shelter is available better results will be obtained by allowing the sow to graze about a week after littering.

APPRECIATION FROM NEW ZEALAND.

(Editor, "Fruit World.")

Sir,—Many thanks for your services, and congratulations on your enlarged paper.—(Signed) "B.T.T.," Canterbury, N.Z.

APPRECIATION FROM MILDURA.

"Congratulations on the enlargement of your most interesting journal."—Signed W.G.J., Mildura.)
6/11/35.